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CONTENTS of No. V.

ART. I. Lectures on the Elements of Chemistry, delivered in the University of Edinburgh, by the late Joseph Black, M. D.	<p>1</p>
II. Le Malheur et La Pitié : Poëme en quatre Chants. Par M. L'Abbé de Lille	26
III. Traité de Mineralogie. Par le Citoyen Haüy	42
IV. The Works of Richard Owen Cambridge, Esq.	56
V. Publii Virgilii Maronis Opera. Cura Joannis Hunter, LL.D.	60
VI. Modern Geography, digested on a New Plan. By John Pinkerton	67
VII. Second Voyage à la Louisiane. Par Baudry des Lozières	81
VIII. Cours de Morale Religieuse. Par M. Necker	90
IX. A New Anatomical Nomenclature. By John Barclay, M. D.	99
X. Amadis de Gaul. By Vasco Lobeyra. Translated by Southey and by Rose	109
XI. Observations on Crural Hernia. By Alex. Munro, junior, M. D.	136
XII. Pallas's Travels through the Southern Provinces of the Russian Empire, in the years 1793 and 1794	146
XIII. Millar's Historical View of the English Government, from the Settlement of the Saxons in Britain; to the Revolution in 1688	154
XIV. Schweighæuser's Edition of Athenzi Naucratitæ Deipnosophistarum libri quindecim	181
XV. Aldini's Account of the late Improvements in Galvanism	194
XVI. Sibbald's Chronicle of Scottish Poetry, from the 13th Century to the Union of the Crowns	198
XVII. Miss Williams's Political and Confidential Correspondence of Lewis XVI.	221
XVIII. Wheatley's Remarks on Currency and Commerce Quarterly List of New Publications	231 252

ADVERTISEMENT.

THE Editors have annexed to this Number, a List of all the Books that have been published in this country during the last three months, and of the most considerable works that have yet reached them from the Continent. The List, as it stands, is unquestionably the most complete that has yet been presented to the Public; and the Editors have it in contemplation to enlarge it, in some of the succeeding Numbers, by the addition of very brief characters of such of the new works as have been perused, and are not thought to require a more extensive discussion.

24th October, 1803.

PRESENTED BY
ABANI NATH MUKHARJI
OF UTTARPURA.

EDINBURGH REVIEW,

OCTOBER 1803.

NO. V.

ART. I. *Lectures on the Elements of Chemistry, delivered in the University of Edinburgh, by the late Joseph Black, M.D. &c. &c. Now published from his MSS. by John Robison, LL.D. Professor of Natural Philosophy in the University of Edinburgh. 2 vol. 4to. pp. 1384. Longman & Rees, London. Creech, Edinburgh. 1803.*

IN performing the duties of Editor to the discourses of his departed friend, Professor Robison had peculiar difficulties to overcome. With a few exceptions, Dr Black's lectures were left in a very disordered and imperfect state; generally written indistinctly upon scraps of paper; often in the form of notes or memorandums, from which he had spoken extempore; frequently consisting of references to the experiments that went on during the lesson.

To counterbalance these disadvantages, the editor possessed some very important qualifications and happy facilities. He had known Dr Black most intimately for a long course of years; during which he had been, first, his favourite pupil, then his successor, and, lastly, his colleague. He enjoyed the friendship of the distinguished circle of philosophers among whom this great man, after achieving the most brilliant discoveries of modern times, happily and elegantly passed the quiet remainder of his days. From these friends, Mr Robison obtained all the information and assistance that the nature of his office required. He had free access to every document which could enable him to furnish the public with an accurate transcript of these celebrated lectures, or to aid his own recollections in presenting a sketch of their author, and in completing a history of the steps by which his discoveries were made. By a coincidence, equally rare and fortunate, journals of Dr Black's scientific pursuits were preserved from the time of his first application to speculative matters; and Mr Robison has been enabled to supply some of the dates

which were of importance, from his own recollection of incidents casually set down.

' There are some in which he seems to have inserted every thing as it took his fancy, in medicine, chemistry, jurisprudence, or matters of taste ; and I find others into which he has transferred the same things, but has distributed them according to their scientific connexions. In short, he has kept a journal and ledger of his studies, and has posted his books like a merchant. I have looked over these memorandums with some care, and have there seen the first germs of those discoveries which have at last produced such a complete revolution in chemical science. What particularly struck me, was the steadiness with which he advanced in any path of knowledge,—*nulla retrorsum*. Things are inserted for the first time, from some present impression of their singularity or importance, but without any allusion to their connexions. When a thing of the same kind is mentioned again, there is generally a reference back to its fellow ; and thus the most insulated facts often acquired a connexion which gave them scientific importance.' Preface, p. xxii. xxiii.

Mr Robison has performed the duty entrusted to him by his friend's executors, in such a manner as must entitle him not merely to their thanks, but to the lasting gratitude of the scientific world. He has presented us with a very full, and apparently a very accurate collection, of the most valuable parts of the lectures, as nearly as possible in the very words of the teacher. He has faithfully adhered to the arrangement of the course, except in two instances, where a slight change seems to be perfectly justified by the convenience which attends it. His preface contains a clear and compendious account of the import of Dr Black's discoveries, and a very interesting sketch of his life. In the foot-notes, he has occasionally added to the rich collection of facts and observations contained in the text, several valuable remarks and statements suggested by his own experience. In the more copious notes subjoined to each volume, he has introduced various discussions of the highest importance both to the elucidation of the general subject, and the establishment of leading points in the history of the science. Let our scientific readers consider, how much of all this consists in mere labour, unrepaid by the peculiar reward of genius ; and let them remember that Mr Robison's talents are as original as his acquirements are various and profound : they will then be able to estimate the extent of the obligations under which he has laid them by editing this valuable work.

It would be perfectly inconsistent with our plan, and far exceed our limits, to analyze these lectures, or the commentaries of the editor, which, like the text, must necessarily be very miscellaneous. We shall confine ourselves to a few general observations on each of the two departments ; and shall, in the first place, endeavour to make our readers acquainted with the illustrious

rious man whose life and discoveries confer upon the present publication its chief interest.

Joseph Black was sprung from a Scotch family, transplanted first to Ireland, and then to France, the country which gave him birth. He spent, in Bordeaux and its vicinity, those years of infancy devoted by the constitution of human nature to imbecility, thralldom and ignorance, and extolled, by the general consent of mankind, as the season of genuine happiness. The biographer has wisely passed over the history of this blissful period, and preferred dwelling upon those scenes which display the ripened powers of the mind. After an account of the intimacy which subsisted between the amiable parents of the philosopher and the celebrated président Montesquieu, the narrative is pursued from the period of Dr Black's removal to Belfast, in the twelfth year of his age. He there received the rudiments of his literary education, and finished it at the University of Glasgow, the scene of his future discoveries. His attention appears to have been divided between the science which his natural bias led him peculiarly to cultivate, and those more general objects of speculation which enlarge the understanding, while they improve the taste. Although his application to these delightful pursuits was never very ardent, it was steady and vigorous. If he did not, like Pascal, Newton, McLaurin, and various writers on lighter subjects, astonish the world by a premature display of talents, his want of those stronger passions, which lead to an early developement of genius, insured him the possession of a calm and immovable judgement, a patient capacity of observation, and a modest distrust of theory, —the most essential characteristics of the inductive philosopher.

In the course of his studies, he does not appear to have entered deeply into the abstract sciences, either of mathematical or metaphysical truth. His taste led him rather to the contemplation of real and external objects; and he soon employed as much of his talents as he ever devoted to severe study, in the investigations of experimental philosophy. The physical discoveries of Sir Isaac Newton attracted his chief admiration; and, upon the unequalled models of inductive disquisition which the treatise of Light contains, his scientific habits were happily formed. After he had, by his own discoveries, laid the foundation of a revolution in science, almost equal to the changes which his great master had effected, we find him steadily persevering in the same strict and chastened system of inductive logic, and freely acknowledging the sources of his skill.

‘ My acquaintance with him (says Mr Robison) begins at Glasgow in 1758, I being then a student in that University; and it began in a way which marked the distinguished amiableness of his disposition and behaviour.

favour. It was at the house of one of the Professors, to whom I was telling the great entertainment I had received from the lectures of Dr Robert Dick, Professor of Natural Philosophy, and how much I admired him as a lecturer. Dr Black joined in the commendation; and then, addressing himself to me, questioned me a good deal about natural philosophy, so as to perceive what were the peculiar objects of my attention. His advices relative to my favourite study were so impressive, and given in a manner so unaffectedly serious and kind, that they are still as fresh in my mind as if of yesterday's date. I was a stranger to him, and not even his pupil; and he was prompted to take that pains with me, solely by the way in which he heard me speaking of the lectures of one whom he loved and esteemed. Gently and gracefully checking my disposition to form theories, he warned me to suspect all theories whatever, pressed on me the necessity of improving in mathematical knowledge, and gave me Newton's Optics to read, advising me to make that book the model of all my studies, and to reject, even without examination, every hypothetical explanation, as a mere waste of time and ingenuity.' Preface, p. vii.

The profession of medicine, which Dr Black chose from its consonance with the tenour of his favourite studies, was extremely unsuitable to his delicate constitution, and the amiably solicitous temper of his mind. The duties of his station as a physician, and of his three successive professorships, were, unfortunately for science, (we may add, for his own fame), matters of such anxious care, as to distract much of his attention from the path of original investigation, which he had entered with the most splendid prospects of success. The doctrine of latent heat appears to have been early familiar to his thoughts. In the oldest parcels of his notes, Mr Robison found queries relative to this point; and Dr Black himself asserts, (vol. I. p. 156.), that he can scarcely remember the time when he had not some idea of the disagreement of the facts with the common doctrines of heat. The extracts from the memorandum-books given in these volumes, sufficiently prove, that, while a student, his ideas had been somewhat matured upon the subject. Before the year 1763, his whole experiments and inquiries on the absorption of heat, were brought to a conclusion; and his inaugural dissertation, when he received a degree in 1754, contained an account of his other grand discovery—the nature of the alkaline earths, and the properties of fixed air. He removed from Glasgow to Edinburgh in 1766, and died in 1799. How great a part, then, of this, most valuable life was spent in the mere exercise of professional duties! At an age when the bulk of philosophers are only beginning to strike out new lights, Black had closed his short career of brilliant discovery; entered upon the common task of a chemical teacher; limited his ambition to the simple explication of a science which

he might have created anew; and left to his more ardent, or more fortunate successors, the glories of rearing a system, of which he had laid the firm foundations, and furnished the chief materials. We shall afterwards see, that they are charged with refusing to engrave his name upon the structure, and to bestow his portion of honour on him whose genius and ill fate had left them so ample a share.

In contemplating the intellectual character of this eminent person, we cannot fail to be delighted with the observation of that unity which seems peculiar to minds of the first order. An original genius is often to be found in all the departments of human excellence. But it is rarely, indeed, that we can discover one whose features are at once distinctly marked, and nicely blended; each different from the ordinary cast, and all animated by the same spirit. The most astonishing intellect that has ever been permitted to enlighten mankind, possessed this rare harmony in the very highest degree. Those qualities which distinguished the father of inductive science from every other philosopher, were equally conspicuous in each of his various exertions; and the preeminent dignity of his powers was sustained through all the thousand operations by which he enlarged the grasp of the human mind. It is in vain that we search every corner of the Newtonian writings, for some trifling proof that their author was, like ourselves, liable to the common intellectual failings of the species. We are consoled by no glimpse of wavering steps, even on the most delicate ground; or hasty advances, where the footing is surest, and the prize most attractive; or careless examination, where the intermediate objects are most trivial; or relaxation, when the greatest obstacles have been surmounted; or intemperate triumph, when the most dazzling prospects are displayed. Each height is reached by the safest and the shortest path, with the smallest bustle; and the attainment is only valued as leading to some loftier eminence. Each position is alike marked by its distance from the ordinary level; by the nature of the works which secure it, and of the country which it commands. The chief characteristic of Newton, is the degree of superiority in which he towers above every other natural philosopher, so as to form a class by himself. But the kind of his excellence is also remarkable and uniform. The distance and dissimilarity of the objects which his discoveries enable us to compare, is not more astonishing, than the ease and simplicity of the means of comparison. The pleasure of contemplation, which forms the primary object of all abstract science, and which the view of those comparisons invariably bestows, is equalled by the practical importance of the consequences to which they may be applied. The enunciation of the proposition is not

more unexpected, than the demonstration is flowing, and the corollaries useful. All those various investigations, too, are the easy and natural work of one great, simple mind, versatile in the direction of its efforts, but uniform in its mode of operation; not the attempts of an ordinary intellect, straining at universality by ambitious mimicry of different talents.

In these particulars, we cannot avoid observing a striking analogy between the philosophical genius of Black and that of Newton. None of this illustrious man's followers has so correctly seized the true spirit of inductive reasoning by which he was guided, or combined so happily the utmost simplicity of means with the accomplishment of the most difficult and important ends. In all Dr Black's analytical inquiries, we perceive how much belongs to the mind of the observer; how little is left to the trick and dexterity of the operator. By placing nature in new combinations of circumstances, he extorts from her (to use the language of Lord Bacon) some of her sublimest secrets: But these combinations are always simple and conclusive. He knows, too, that the ordinary combinations which we witness every hour, require only patient observation, to furnish the unbiased reasoner with ample opportunities of generalization. Accordingly, in no scientific inquiries, since the date of the Principia and Optics, do we find so great a proportion of pure ratiocination, founded upon the description of common facts, but leading to the most unexpected and important results, as in the two grand systems of Black. This mode of investigating the laws of nature has various advantages of the highest consequence. It diminishes incalculably the chances of mistake, by precluding the use of complicated apparatus. It brings home to every one the evidence of the discoveries, and exposes the demonstration of each proposition to the most severe and universal scrutiny. It opens, to all who can observe and reason, the field of important inquiry, and raises the mind to the most general views of the constitution of the world.

The same happy turn of mind which placed the scientific investigations of Dr Black so near the greatest discoveries that have ever been made by the species, was perceptible also in the elegance and ingenuity which it mingled with all his personal habits.

* I have already observed,' says Mr Robison, 'that when I was first acquainted with Dr Black, his aspect was comely and interesting. As he advanced in years, his countenance continued to preserve that pleasing expression of inward satisfaction, which, by giving ease to the beholder, never fails to please. His mien was perfectly easy, and unaffected, and graceful. He was of most easy approach, affable, and readily entered into conversation, whether serious or trivial. His mind,

being abundantly furnished with matter, his conversation was at all times pertinent and agreeable: for Dr Black's acquirements were not merely those of a man of science. He was a stranger to none of the elegant accomplishments of life. He therefore easily fell into any topic of conversation, and supported his part in it respectfully. He had a fine or accurate musical ear, and a voice which would obey it in the most perfect manner; for he sung, and performed on the flute, with great taste, and feeling; and could sing a plain air at sight, which many instrumental performers cannot do. But this was science. Dr Black was a very intelligent judge of musical composition; and I never heard any person express so intelligibly the characteristic differences of some of the national musics of Europe. I speak of Dr Black as I knew him at Glasgow: After his coming to Edinburgh, he gave up most of those amusements. Without having studied drawing, he had acquired a considerable power of expression with his pencil, both in figures and in landscape. He was peculiarly happy in expressing the passions; and seemed, in this respect, to have the talent of a history painter. He had not had any opportunities of becoming a connoisseur; but his opinion of a piece of painting, or sculpture, was respected by good judges. Figure, indeed, of every kind, attracted his attention;—in architecture, furniture, ornament of every sort, it was never a matter of indifference. Even a retort, or a crucible, was to his eye an example of beauty or deformity. His memorandum books are full of studies (may I call them) of this sort; and there is one drawing of an iron furnace, fitted up with rough unhewn timber, that is finished with great beauty, and would not disgrace the hand of a Woollet. Naturally, therefore, the young ladies were proud of Dr Black's approbation of their taste in matters of ornament. These are not indifferent things; they are features of an elegant mind, and they account for some part of that satisfaction and pleasure which persons of all different habits and pursuits felt in Dr Black's company and conversation.

'I think that I could frequently discover what was the circumstance of form, &c. in which Dr Black perceived or sought for beauty,—it was some suitableness or propriety; and he has often pointed it out to me, in things where I never should have looked for it. Yet I saw that he was ingeniously in the right. I may almost say that the love of propriety was the leading sentiment of Dr Black's mind. This was the first standard to which he appealed in all his judgments; and I believe he endeavoured to make it the directing principle of his conduct. Happy is the man whose moderation of pursuits leaves this sentiment in possession of much authority. Seldom are our judgments greatly wrong on this question; but we too seldom listen to them.' Preface, p. lxvi. lxvii.

The following extract describes Dr Black's merits as a Lecturer, with a truth and precision which every one will immediately feel who has had the happiness of receiving instructions from that eminent teacher. The sustained elegance and propriety which

we have already taken notice of, as characteristic both of his original inquiries, and of his demeanour in the ordinary affairs of life, was equally conspicuous in this favourite line of exertion.

Dr Black now formed the firm resolution of directing his whole study to the improvement of his scholars in the *elementary* knowledge of chemistry. He saw too many of them with a very scanty stock of previous learning. He had many from the workshop of the manufacturer, who had none at all; and he saw that the number of such hearers must increase with the increasing activity and prosperity of the country: And these appeared to him as by no means the least important part of his auditory. To engage the attention of such pupils, and to be perfectly understood by the most illiterate, was therefore considered by Dr Black as his most sacred duty. Plain doctrines, therefore, taught in the plainest manner, must employ his chief study. That no help may be wanting, all must be illustrated by suitable experiments, by the exhibition of specimens, and the management of chemical processes. Nice and abstruse philosophical opinions would not interest such hearers; and *any* doctrines, inculcated in a refined manner, and referring to elaborate disquisitions of others, would not be understood by the major part of an audience of young persons, as yet only beginning their studies.

To this resolution Dr Black rigidly adhered, endeavouring every year to make his courses more plain and familiar, and illustrating them by a greater variety of examples in the way of experiment. No man could perform these more neatly and successfully. They were always ingeniously and judiciously contrived, clearly establishing the point in view, and never more than sufficed for this purpose. While he scorned the quackery of a showman, the simplicity, neatness, and elegance, with which they were performed, were truly admirable. Indeed, the *simplex munditus* stamped every thing that he did. I think it was the unperceived operation of this impression that made Dr Black's lectures such a treat to all his scholars. They were not only instructed, but (they knew not how) delighted; and without any effort to please, but solely by the natural emanation of a gentle and elegant mind, co-operating, indeed, with a most perspicuous exhibition of his sentiments, Dr Black became a favourite lecturer; and many were induced, by the report of his students, to attend his courses, without having any particular relish for chemical knowledge, but merely in order to be pleased. This, however, contributed greatly to the extending the knowledge of chemistry; and it became a fashionable part of the accomplishment of a gentleman.' Preface, p. i. li.

One prominent feature in Dr. Black's character, Mr Robison does not appear to have delineated with sufficient strength: we mean the want of passion. There can be no doubt that this defect, however much it may have contributed to the ease and calmness of his enjoyments, deprived his mind of that energy by which alone the greatest things are performed in the pursuits either

either of speculation or of active life. When we consider how short a period of time his original inquiries occupied, how carelessly he left his discoveries to be appropriated by others, how little progress he made in following out those sublime ideas, by the help of which his followers have overturned and created systems; nay, how long an interval he frequently suffered to elapse between the conception and execution of some experiment which was to decide the truth of a favourite theory; we must be convinced that he felt little of the inspiration so necessary to the full success of those happy few who possess all the powers of philosophical investigation. This want of passion, or of ardour and energy, or, to give it the right name, this indolence, was conspicuous in all the particulars of Dr Black's conduct. The discovery which he first made, was the last of being completed. He never could be induced to publish any account of it to the world, notwithstanding the constant attempts of his rivals to deprive him of the claim. He was at all times averse to publication, and fastidious, to an uncommon degree, in his judgments of his own compositions. When the *experimentum crucis* of his doctrine of latent heat occurred to him, he delayed making it for many months, because there happened to be no icchouse in the town where he lived. In extending this doctrine to the case of aërial fluidity, he remained for years satisfied with analogies and rough sketches of experiments, which he could at any time have performed with ease; and however little doubt he had reason to entertain of the result, he evinced none of that anxiety, which is so natural to a discoverer even on the least important points of his theory. After ascertaining the existence of fixed air, and determining some of its qualities, he delayed investigating its other properties, and pursuing the most obvious experiments on analogous bodies; until the field was occupied by others, who, with scarcely a spark of his truly philosophical genius, were enabled, by their superior activity, to make the most valuable discoveries. Nor can we avoid remarking how closely his propriety and correctness of character was connected with this freedom from passion, which always left his mind, as it were, disengaged, unabsorbed by any predominant enthusiasm, and at leisure to regard the most trivial concerns. He was never, like Newton or Smith, known to be absent in society; or thoughtless and playful in his hours of relaxation, like Hutton and Hume.

"As Dr. Black," (we quote the words of his near relation Dr Ferguson *) "had never any thing for ostentation, he was, at all times, precisely

* Mr Robison has incorporated with the narrative contained in his Preface, several extracts from a biographical sketch of Dr Black, drawn up by this eminent writer.

precisely what the occasion required, and no more. Much as he was engaged in the details of his public station, and chemical exhibitions, his chambers were never seen lumbered with books and papers, or specimens of mineralogy, &c. or the apparatus of experiments. Nor did any one see Dr Black hurried at one time to recover matter which had been improperly neglected on a former occasion. Every thing being done in its proper season and place, he ever seemed to have leisure in store; and he was ready to receive his friend or acquaintance, and to take his part with cheerfulness in any conversation that occurred. And let me remark, that no one ever with more ease to himself refrained from professional discussions of any sort, or conversation in which he was acknowledged superior,—or with less self-denial, in mixed company, left the subject of conversation to be chosen by others." Preface, p. lxviii.

His attention was awake, even to the mere trifles of life. His domestic affairs were regulated with an attention to minute circumstances, rarely to be observed in the household of a philosopher; and the fortune which his admirable economy enabled him to amass (notwithstanding various diminutions that his income suffered from his liberal and friendly disposition), was accurately bequeathed to his near relations, in shares proportioned to the degree which each individual possessed of his esteem. He was often heard to express anxiety with respect to the mode of his death, and to wish for a quiet departure from this world, without the evils of a long continued sick-bed. It is singular, how characteristic of the man, and how suitable to such feelings, this last scene actually proved.

" On the 26th November 1799, and in the seventy-first year of his age, he expired, without any convulsion, shock, or stupor, to announce or retard the approach of death. Being at table, with his usual fare, some bread, a few prunes, and a measured quantity of milk, diluted with water, and having the cup in his hand when the last stroke of his pulse was to be given, he had set it down on his knees, which were joined together, and kept it steady with his hand, in the manner of a person perfectly at ease; and in this attitude expired, without spilling a drop, and without a writhe in his countenance; as if an experiment had been required to shew to his friends the facility with which he departed." * His servant opened the door to tell him that some one had left his name; but getting no answer, stepped about half way towards him, and seeing him sitting in that easy posture, supporting his basin of milk with one hand, he thought that he had dropped asleep, which he had sometimes seen happen after his meals. He went back, and shut the door, but before he got down stairs, some anxiety, which he could not account for, made him return and look again at his master, when then, he was satisfied, after coming pretty near him, and turned

* The first part of this extract is taken from the Memoir of Dr Ferguson.

to go away ; but again returned, and coming quite close to him, he found him without life.' Preface, lxxiv, lxxv.

Such was the man, of whose lectures the volumes now before us contain a faithful transcript. They are, therefore, a most valuable acquisition, although we should allow them only the merit of a literary curiosity, a relique, of the greatest inductive philosopher that has appeared since the days of Sir Isaac Newton, and, unfortunately, one of the very few monuments which his modesty and his indolence permitted him to leave. But this publication is highly important in another point of view ; it contains the only history which we have of the discovery of latent heat, and a much more copious account of the discovery of fixed air than that which the author published during his life.

The former of these discoveries is, in our opinion, the most important in its consequences, and the most signal, with regard to difficulty, of any that has been made since the application of gravity to explain the laws of planetary motion. It differs from all the others with which we are acquainted in this material respect, that it is separated, by a vast interval, from the previous steps of our knowledge. By how many insensible gradations did we arrive at the doctrine of the composition of water ? First, the inflammation of certain vapours was observed ; then, the discovery of fixed air having taught philosophers to examine the properties of certain elastic fluids, one of these was found to differ from the rest in being inflammable. It was afterwards remarked, that this air, when slowly burnt, produced moisture upon a cold body held over the flame : fixed air was, by some, thought to be produced in the same process ; and reasoners inferred from hence, that the water had been contained in the inflammable air. But others varied the experiment, and burned the air in close vessels ; moisture was still formed, and accurate observation showed that no new aëriform product resulted from the combustion. A new species of air having been discovered, much better calculated than common atmospherical air to support flame, the combustion of inflammable air was tried with this new species, and it was found to be extremely rapid. The combustion being performed in close vessels, the inaccuracy of the experiment gave rise to various errors ; but water was always found to be produced : and some ingenious men, particularly Mr Watt, reasoning from all these facts, concluded that this fluid is a compound of the two airs, deprived, by their union, of a considerable portion of their latent heat, the quantity (viz.) which is necessary for maintaining the elastic aëriform state. This idea was verified by the accurate experiment of Mr Cavendish, in which the quantity of water formed was compared with the quantities of the airs burnt ; and the French chemists added new proofs of the

the proposition by the analytical process. This chain of investigation is evidently so long, and of such slow formation, that we cannot, with any degree of correctness, appreciate the comparative merits of those who severally extended it; nor point out the particular link upon which the grand discovery hangs. And the same distribution of praise is strictly proper in almost all the other instances of successful physical research. Even the composition of light was only unfolded by degrees, and appears to have been wonderfully nearly discovered by Grimaldi and others, with whose works Newton must have been acquainted. There are numerous proofs of such anticipations contained in the writings of Hook and Mayow, as our chemical readers well know. Mr Robison has, in his notes to these lectures, pointed out several new and remarkable instances, more particularly from the works of the former.* The same observations may be extended to the most important discoveries in abstract science. The method of fluxions itself may be traced through a long succession of less elegant and less general inventions for finding quadratures and subtangents.

But two great physical discoveries seem to have followed this *law of continuity*, in so slight a degree, that they may almost be allowed to form a case of exceptions to its operation. These are the universality of gravitation, and the combination of heat. As, before the time of Sir Isaac Newton, the influence of weight was only known by the falling of heavy bodies, all ideas of the attraction of gravitation were connected with this particular line of its operation: the only language in which men had ever learnt to express themselves upon the subject, was borrowed immediately from the particular case of vertical descent, and confined to the very limited sphere of its occurrence. In like manner, before the time of Dr Black, all the knowledge we had of the matter, or the motion of heat, was intimately connected with the idea of a substance, or a state, by which the sense of touch is affected in a specific manner, and the dimensions of bodies sensibly increased. The phlogiston of Stahl was evidently no inference from induction, even as modified and altered by his followers; neither was it the hypothesis of any peculiar qualities in the matter of heat: It was the assumption of a substance, different from every other with which we are acquainted, endued with qualities repugnant

to

* Note 13. Vol. I. contains a very interesting account of Hook's theory of combustion. Its similarity to the antiphlogistic doctrine is truly singular; and Mr Robison is, so far as we know, the first writer who has remarked it. In p. 537, he says, that he only observed it in 1798: but there must be some mistake in this; for he published a notice of it in his valuable article *Pneumatics*, §. 371, *Encyclopædia Britannica*, which appeared in the year 1795.

to the universal properties of matter, and capable of producing every effect which the inventors might wish to explain. Phlogiston was indeed denominated the matter of heat and light; but it might as well have been called the reguline principle; and then, instead of saying that the escape of the matter of heat and light causes the calcination of metals, the followers of Stahl would have said, that the escape of the reguline principle causes the combustion of inflammable bodies. It is evident, that no specific effect, no subordination to the laws of chemical affinity, was ever ascribed to the substance which affects our sense with the feeling of heat, until Dr Black, from the most faithful and cautious examination of obvious facts, found, that this substance is capable of uniting with bodies, so as not to affect our senses with the peculiar feeling of heat, and yet to produce upon those bodies the most important changes—in the same manner that an acid, when combined with an alkali, ceases to taste sour, while it destroys the acridity of the alkali, and forms a third body, possessing the noxious qualities of neither. This physical law, discovered by the strictest induction, is applicable to the explanation of an infinite number of phenomena: its operations actually occur in almost every chemical experiment, and its influence is perceived in all the great processes of nature. For a most interesting detail of the steps by which Dr Black was led to the knowledge of it, we refer our readers to the first volume of these lectures. This narrative appears to us a model of philosophical writing, as well as of induction; making allowance for the style of conversation, which is obviously adopted as most suitable for a public elementary lecture.

The other great discovery of Dr Black (the nature of the alkaline earths, and of fixed air) was scarcely less important in its consequences to chemical science, than the one which we have been contemplating. The account of it contained in these volumes, differs considerably from that which the author himself published. It dwells more minutely upon the steps of the investigation, and (with the exception of a few remarks upon borax, apparently copied from the treatise on magnesia alba and quicklime) it is composed in a style much less careful and finished than that which the Doctor seems to have employed when he wrote for publication.

Our readers will derive some entertainment from the comparison; and we shall here give, as a specimen of the manner which distinguishes the whole of these lectures, the following passage from the history of the discovery of fixed air. It unites, with great simplicity of diction, an exemplification of Dr Black's inimitable simplicity and ingenuity in the contrivance of experiments.

‘ In the same year in which my first account of these experiments was published, namely 1757, I had discovered, that this particular kind of air, attracted by alkaline substances, is deadly to all animals that breathe it by the mouth and nostrils together ; but that if the nostrils were kept shut, I was led to think that it might be breathed with safety. I found, for example, that when sparrows died in it in ten or eleven seconds, they would live in it for three or four minutes when the nostrils were shut by melted suet. And I convinced myself, that the change produced on wholesome air by breathing it; consisted chiefly, if not solely, in the conversion of part of it into fixed air. For I found, that by blowing through a pipe into lime-water, or a solution of caustic alkali, the lime was precipitated, and the alkali was rendered mild. I was partly led to these experiments by some observations of Dr Hales, in which he says, that breathing through diaphragms of cloth dipped in alkaline solution, made the air last longer for the purposes of life *.

‘ In the same year, I found that fixed air is the chief part of the elastic matter which is formed in liquids in the vinous fermentation. Van Helmont had indeed said this, and it was to this that he first gave the name *gas silvestre*. It could not long be unknown to those occupied in brewing or making wines. But it was at random that he said it was the same with that of the Grotto del Cane in Italy (but he supposed the identity, because both are deadly) ; for he had examined neither of them chemically, nor did he know that it was the air disengaged in the effervescence of alkaline substances with acids. I convinced myself of the fact, by going to a brew-house with two phials, one filled with distilled water, and the other with lime-water. I emptied the first into a vat of wort fermenting briskly, holding the mouth of the phial close to the surface of the wort. I then poured some of the lime-water into it, shut it with my finger, and shook it. The lime-water became turbid immediately.

‘ Van Helmont says, that the *dumple*, or deadly vapour of burning charcoal, is the same gas silvestre ; but this was also a random conjecture. He does not even say that it extinguishes flame ; yet this was known to the chemists of his day. I had now the certain means of deciding the question, since, if the same, it must be fixed air. I made several indistinct experiments, as soon as the conjecture occurred to my thoughts ; but they were with little contrivance or accuracy. In the evening of the same day that I discovered that it was fixed air that escaped from fermenting liquors, I made an experiment which satisfied me. Unfixing the nozzle of a pair of chamber bellows, I put a bit of charcoal, just red hot, into the wide end of it, and then quickly putting

* In the winter 1764-5, Dr Black rendered a considerable quantity of caustic alkali mild and crystalline, by causing it to filter slowly by means of an apparatus which was placed above one of the spiracles in the ceiling of a church, in which a congregation of more than 1500 persons had continued near ten hours.—*Editor.*

ting it into its place again, I plunged the pipe to the bottom of a phial, and forced the air very slowly through the charcoal, so as to maintain its combustion, but not produce a heat too suddenly for the phial to bear. When I judged that the air of the phial was completely viviated, I poured lime-water into it, and had the pleasure of seeing it become milky in a moment.' Vol. II. p. 87. 88.

We cannot easily imagine a more interesting narrative; it reminds us of Montucla's admirable and animating account of the Torricellian experiment, with this essential difference, that here the narrator was himself the performer of the action.

The following passage, from the concluding discourse on heat, may serve as an example of Dr Black's powers of description; and we cannot help regretting, that these volumes do not contain also the lecture in which he was wont (unnecessarily, indeed, but with great force of invective) to expose the manifold absurdities of Meyer's *acidum pingue*.

' It is plain, that not only all animal and vegetable life, but that the whole face and appearance of nature, the very form and powers of the elements themselves, depend on this limited action of heat. There are none of the elementary bodies with which we are better acquainted than water. Let us attend a little to the powers and qualities by which it acts its part in this system of beings. We all admire its pure transparency in a spring; the level and polished surface with which it reflects objects that are on the banks of a lake; the mobility with which it runs along the channel of a brook, and the incessant motion of its waves in a stormy sea. But, when viewed with a philosophical eye, it appears much more an object of admiration. The same water, which, under its usual form, is such a principal beauty in the scene of nature, is employed in her most extensive operations, and is necessary to the formation of all her productions. It penetrates the interior parts of the earth, and appears to assist in the production of various minerals, stones, and earths, found there, by bringing their different ingredients together, and applying them to one another properly, that they may concrete. We know it arises in vapours from the surface of the ocean, to form the clouds, and to descend again in rain upon the dry land, and give origin to springs, rivers, and lakes; or, upon proper occasions, to form deep snow, which protects the ground and vegetables from the intense and mortal cold to which some parts of the world are exposed; and, after it has performed this useful office, it readily yields to the heat of summer, and returns to a state in which it serves the same purposes as rain. By its fluidity and tenuity, it penetrates the soil, and the seeds of plants which that soil contains. These it causes to swell and germinate into plants, which depend on water for support. It passes with freedom and ease through all their minutest tubes and vessels, and carries with it materials necessary for nourishment and growth, or changes its appearance so as to become part of the plant. There is no

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no plant or vegetable substance, that does not contain in its composition a large quantity of water, easily separable from it. The hardest woods obtain a great deal. The softer and more succulent parts of vegetables are almost totally composed of it. Even the oils and resinous substances can be resolved in part into water. It is plainly as necessary to the animals, and is found to be as copious an ingredient in the composition of their bodies, and of all the different parts of them.

These are the numerous and extensive uses of this beautiful element. But, in this succession of forms and operations which it undergoes, you will perceive that it is set in motion, and adapted to these ends, by the nice adjustment and gentle vicissitudes of heat and cold, which attend the returns of day and night, and summer and winter; and that even the *form*, under which it and the other elements play their parts, depends on the limited action of heat. Were our heat to be diminished, and to continue diminished, to a degree not very far below the ordinary temperature, the water would lose its fluidity, and assume the form of a solid hard body, totally unfit for the numerous purposes which it serves at present. And, if the diminution of heat were to go still farther, the air itself would lose its elasticity, and would be frozen to a solid uselesss matter like the water; and thus all nature would become a lifeless, silent, and dismal ruin. Such being the important part allotted to water, in the magnificent series of natural operations, in consequence of the qualities communicated to it by heat, all its properties become interesting objects of contemplation to a sensible heart. That peculiarity, by which the expansion and contraction of water by heat is distinguished from the same effect on other substances, I mean its irregularity between 32° and 40° of Fahrenheit, naturally attracts attention. Even this seemingly trifling distinction has been shewn by Count Rumford to have a mighty effect in rendering our habitation more comfortable.

'On the other hand, were the heat which at present cherishes and enlivens this globe, allowed to increase beyond the bounds at present prescribed to it; beside the destruction of all animal and vegetable life, which would be the immediate and inevitable consequence, the water would lose its present form, and assume that of an elastic vapour like air; the solid parts of the globe would be melted and confounded together, or mixed with the air and water in smoke and vapour; and nature would return to the original chaos.' Vol. I. p. 245—247.

Of the conversation style, in which these lectures are for the most part written, we may remark, that although it usually possesses the advantages of plainness and fluency; yet, being adapted to the tones of the voice, it is very apt, when read over by a third person, to be deficient in perspicuity; and being less pre-meditated, it is scarcely ever equal in precision to a good written style. Its want of elegance is a defect of much less consequence; but all these circumstances must conspire to impair the effect.

of this work, unless the occasion of its composition be kept in view.

As a system of chemical instruction, the lectures of Dr Black possess very peculiar merits. Although they are, in many important respects, of necessity far behind the more recent systematical works upon this subject, they may fairly be admitted to contain the most accessible store of information which persons ignorant of the science can at present command. They are delivered, as much as possible, in the analytical mode. They take for granted no previous acquaintance with science in the learner; and they require, less than any work which we know, the assistance of apparatus. Dr Black's manner of introducing the newly discovered substances, has, indeed, no great appearance of systematic arrangement; but it should be remembered, that an elementary treatise has other objects in view, than the attainment of that fair outside which forms the chief attraction of philosophical systems. After a person, wholly ignorant of science, has studied chemistry in these volumes, he may have occasion for some such work as Lavoisier or Fourcroy, in order to digest and arrange the knowledge he has picked up. But we believe every one, in the least conversant with the matter, will admit the impracticability of initiating an ignorant person into the science, merely by the assistance of those elegant and curiously systematic authors. It is true, we have sometimes felt inclined, in reading this work, to suspect Dr Black of too great contempt for the synthetic form of instruction. Upon this important point, however, his own arguments, as he delivered them in conversation with Dr Hutton and Mr Robison, have been preserved; and we very willingly transcribe them, as containing a full and plain statement of the principles on which the whole course was constructed. Mr Robison had expressed a very favourable opinion of Lavoisier's sketch of a scientific arrangement, and had alluded to the happy train of synthetic deduction, which it enabled that philosopher to carry through the whole chemical history of bodies—

" This," said Dr Black, " is the very thing I dislike it for. Chemistry is not yet a science. We are very far from the knowledge of first principles. We should avoid every thing that has the pretensions of a full system. The whole of chemical science should, as yet, be analytical, like Newton's Optics; and we should obtain the connecting principle, in the form of a general law, at the very end of our induction, as the reward of our labour. You blamed, and, in my opinion, justly, De La Grange's *Méchanique Analytique*, for being the very opposite to a real analytical process;—for adopting as the fundamental proposition, as a first principle, a theorem which in fact is nothing more

than a sagacious observation of an universal fact, discoverable indeed in every mechanical phenomenon; but still not a principle, but the mathematical and not the physical result of all our inductions. This is not a fundamental theorem, fit for instructing a novice in the science, but for adepts alone. The case is the same in chemistry.

" But this is not the greatest fault in the arrangement which sets out from the constitution of the atmosphere. In order to get the proofs on which the validity of this first principle must entirely rest, we must fall to work with a number of complex, very complex substances, of which we know nothing, and whose modes of action are among the most mysterious things in chemistry; and the conclusions which we must draw, require a readiness and contention of thought which very few possess,—which a beginner in philosophical investigation cannot possibly possess. It is by no means fair to appeal to a Lavoisier, a Cavendish, or a Berthollet, or other great chemist, for the clearness of the evidence. They are not the proper judges. Lay it before a sensible metallurgist, ignorant of chemistry. Ask this man whether he sees the incontrovertible force of the proof. When I take the matter in this light, I affirm, that, even to a philosopher, the proofs of the fundamental propositions which have been acquiesced in by the authors of this arrangement, are very scanty, very slight, and very refined. This is a fault in a system published for the instruction of the ignorant; and, in the present day, it is a very great fault. There is just now a rage for system,—for complete systems. We have got such a high conceit of our knowledge, that we cannot be pleased with a system which acknowledges any imperfection: It must not leave one open link: It must not leave any thing unexplained. And I see it always happen, that if the application of a system to the explanation of phenomena be very comprehensive, leaving no blanks, and if the explanation have some feasibility, this catches the fancy,—it dazzles the understanding. Nay, we think it impossible that a principle that is false can tally with so many phenomena. This seeming coincidence is considered as a proof of its validity; and we are no longer solicitous about the *direct* proofs adduced at the beginning. I have often heard such arguments for what I knew to be great nonsense. This kind of authority accruing to a theory from its specious and extensive application to phenomena, is always bad; and, with mere beginners in philosophy, it is doing them an irreparable hurt. It nourishes that itch for theory; and it makes them unsolicitous about the first foundations of it;—thus it forms in their minds the worst of all philosophical habits.

" I am resolved to go on in a very different way. I subscribe to almost all Mr Lavoisier's doctrines; and I will teach them all. And I affirm that I shall teach them with an impression of their truth which his method can never make. My students shall get all these doctrines piecemeal;—every one of them by steps which shall be quite easy and confident, because they shall be acquainted with every substance before

I employ its phenomena as proofs. Each of Mr Lavoisier's doctrines shall arise in course, as a final and obvious addition to the properties of some substance already known. Then I shall carry the student back, and shew him that the influence of our new discovery extends also to those substances which we had been considering before. Thus, all the doctrines will be had easily, familiarly, and with confidence in their truth.

"I even think that this method will be more pleasant,—the novelties, or reformations, being, by this method, distributed over the whole course. And it will have yet another advantage: It will make the student acquainted with the chemistry of former years, which is far from being unworthy of the attention of a philosopher. Newton, Stahl, Margraaf, Cramer, Scheele, Bergmann, were geniuses not below the common level. But the person who learns chemistry by Lavoisier's scheme, may remain ignorant of all that was done by former chemists, and unable to read their excellent writings.

"I do not find that my old arrangement needs much change: Some I will make,—chiefly in the order in which I treat the inflammable substances and the metals."

We have already mentioned, in general terms, the great additional value which Mr Robison's notes confer upon this publication. Besides a variety of curious and original chemical facts, they illustrate, by several very important documents and acute reasonings, the history of Dr Black's discoveries. They answer the demand which was long ago made by Mr Nicolson, that some contemporary author should adjust the claims of the several philosophers who have borne a part in establishing the doctrine of latent heat.* They prove to a demonstration, that the undivided honour of this grand discovery is due to the author of these Lectures, whose amiable and dignified modesty prevented him from taking the necessary steps to secure his own claims. The following statement of the attempts that have been made to rob him of his just fame, presents no very pleasing picture of the philosophical character; and we are almost inclined to hope, that Mr Robison, from whom our authority is derived, has been mistaken in his decisions. We feel it our duty, however, to give the circumstances to the public as he has detailed them; premising that we are sorry we can see no immediate reasons for doubting his accuracy, while we rely most implicitly on his veracity and candour.

Dr Black never published his own account of the discovery, but he gave it every year after 1760, in his Lectures, to very numerous classes.

* Translation of Fourcroy, 27th Section of the valuable Note to Part I. chap. V. § 2.

classes of students from various parts of Europe. It is proved, from his note-books, as well as from the concurring testimony of Messrs Robison and Watt, that he completed this discovery, as far as regards aqueous fluidity, between the years 1754 and 1757. We have already remarked, that he immediately extended it to the case of aërisform fluidity, even before he had actually performed the experiments by which the application is illustrated in detail. Among his pupils, Dr Black had many gentlemen of Geneva; particularly a M. Chaillet, in 1763, and a Dr Odier, who corresponded with M. De Luc, and communicated to our countryman several of that gentleman's meteorological observations. A Swedish gentleman, of the name of Willems, or Willemson, (from Stockholm), was also much in the company of Dr Black and his friends, about the year 1768. He was wholly occupied with chemical studies. From none of these students was the slightest hint ever obtained, that a doctrine in any degree resembling that of latent heat, had been known in Geneva or Sweden.

While the communication between this country and those parts was thus constant, manuscript copies of Dr Black's lectures were in very general circulation among his students. They were even sold at a moderate price; and they contained accounts of his discoveries, if not altogether correct, at least abundantly copious for all the purposes of plagiarism. In 1770, a surreptitious publication of them was made by a London bookseller, under a general title; and this work gave a very distinct statement of the leading parts of the doctrine, with a full acknowledgement that Dr Black was the discoverer. In 1772, Mr Wilcke of Stockholm read a paper to the Royal Society of that city, in which the absorption of heat, by melting ice, is described; and in the same year, M. De Luc of Geneva, published his *Recherches sur les Modifications de l'Atmosphère*, in which the doctrine is, with much less accuracy, employed to explain some meteorological facts.

Our readers will probably have anticipated the conclusion which this statement of circumstances forces us to draw,—that both the one and the other of these gentlemen, in all probability, owed their knowledge of the absorption of heat, to the diffusion of Dr Black's discovery, through the medium of his Lectures. But the subsequent conduct of M. De Luc deserves our farther attention; and leaves as little doubt, with respect to his culpability, as can exist upon a question of this sort.

About the year 1782, Dr Black was informed, that M. De Luc earnestly wished to become the editor of his observations upon latent heat, in order to secure Dr Black's claims to the discovery, from the attempts which were continually made by others to appropriate it. In consequence of repeated solicitations,

Dr Black gave his friend Mr Watt permission to communicate the leading points of his theory, and instructions to perform the experiments before M. De Luc. Neither the Doctor nor his friends had now the smallest anxiety upon the subject: they trusted in the promise of the Genevese philosopher, and expected to see in his great work, a full vindication of the claims which he had anxiously volunteered to defend. The publication at last arrived; and the mode of defence was somewhat novel. It consisted in a refutation of the claims urged by others, and an assertion, that the discovery of latent heat was entirely M. De Luc's own, Dr Black being only allowed the merit of having first *attempted* to measure the exact quantity of absorption in the particular case of aqueous fluidity. Mr Watt then wrote a letter to M. De Luc, containing a full explanation of Dr Black's discovery, and insisted that this should be published in the next volume of the work. It appeared accordingly; but was accompanied only by an acknowledgement of the satisfaction which M. De Luc received, from learning that his own system had so able a defender as Dr Black; a circumstance, he adds, which will give him new confidence in the doctrine.

From the foregoing statement, then, it appears, that M. De Luc published a work, containing a few crude ideas on the combination of heat; that he afterwards became better acquainted with the subject; that he formed a design to pass for the author of the doctrine, by completing his knowledge of the theory, and twisting his former vague statements into some kind of similarity; that, for this purpose, he applied to the man whom he knew to be the discoverer, and obtained, from him, a full account of the matter, under the pretext of defending his claim against others; that instead of fulfilling his promise, he only refuted the claims of those others, in order to bring forward his own; converted the documents which he had procured, to his own use; and concluded by politely laughing at the person whom he had thus defrauded. Such is the amount of the impression made by Mr Robison's narrative, in the eighth note to the first volume. We wish that some friend of the Genevese philosopher could step forward to clear him from so foul a charge. We are willing to hope, that his conduct may be explained in a way consistent, at least, with the belief of his honesty: for who can hesitate to pronounce, that the conduct here imputed to him, would have been deemed common imposture, if avarice, not vanity, had been the motive, and money, not fame, the end?

Mr Robison has incorporated with the text of these *Lectures*, vol. II. p. 215, some very curious observations upon the conduct of Lavoisier and his associates, both towards Dr Black, and in

the establishment of their new chemical system. We rejoice that this subject is fairly brought before the public; and, on whichever side the decision may finally be given, the history of the science, as well as the political history of the times, is likely to be illustrated by the discussion. That the French chemists formed themselves into a junto for the propagation of their system; that, like all juntas, they delivered their doctrines with an authoritative tone, highly indecorous in matters of science; and that they even displayed somewhat of a spirit of persecution towards those who, from ancient habits, or from a predilection for their own new theories, refused their assent to the antiphlogistic doctrines, are facts which cannot be disputed. As little can it be denied, that the Parisian philosophers, animated, like all similar associations, by an *esprit de corps*, and mingling with this, very strong national partialities, arrogated to themselves the merit of every important discovery, nay, of almost all the detached observations, which had been made in any part of Europe, during the latter half of the eighteenth century. Now, Mr Robison requires us to go a step farther, and to admit that the motive for changing the nomenclature may be found in the same corporation and national spirit,—in a desire to obliterate the remembrance of every thing which did not owe its origin to the associated academicians of France,—in the same combination of innovating phrenzy, and puerile vanity, which produced the new calendar and metrology. We confess our disposition to question this, at least in the extent to which it is here pushed. No one can deny that the love of system had risen to a very great height in France, at the time of the innovations now alluded to; and it would appear, that as much of the calendar and metrology as is analogous to the nomenclature, owed its origin to this spirit of systematizing and classifying all the objects of our contemplation. Instead of blaming the new chemical language for its resemblance to the other changes, we are inclined to laugh at the pedantry of its authors, who could overlook the essential distinction between the two cases, foolishly think of giving new names to the ideas of most ordinary recurrence in common life, and attempt suddenly to alter the language and the habits of the vulgar, for the pleasure of an useless uniformity. It cannot be doubted, that political views mingled with this love of system in preparing the change of the calendar; perhaps those views were the chief inducement to its adoption. But it should be remembered, that mere innovation, however sudden, in matters purely speculative, is liable to no one of the manifold objections which are so decisive against all sudden political changes, however specious. And in this most essential particular,

particular, the two cases are exactly opposed to each other:—that the new nomenclature was adopted, after a series of the most beneficial and fundamental changes had been effected upon the whole science of chemistry; while nothing called for the new calendar, but the most destructive revolution which the violence and folly of mankind ever brought about. The dogmatical spirit, indeed, with which the new nomenclature, and, in general, the new system, was promulgated, had a tendency to obliterate much very valuable information, contained in the writings of the elder chemists: and we conceive, that the present publication, if it served no other end, would be highly important as a collection of things not to be met with in the works of the new school.

Mr Robison, among the observations to which we are now alluding, introduces a fact, upon the authority of Professor Lichtenberg of Gottingen. We give it to our readers as an amusing instance of that universal *charlatanerie* (the word cannot be translated by a people so destitute of the thing) which renders the French national character the least *respectable* of any in the civilized world. When the Parisian chemists, it seems, had finished their grand experiment on the composition of water, they held a sort of festival, at which Madam Lavoisier, in the habit of a priestess, burnt Stahl's *Fundamenta* on an altar, while solemn music played a *requiem* to the departed system. The German professor remarks, that if Newton had been capable of such a childish triumph over the *vortices* of Des Cartes, he could never be supposed the man who wrote the *Principia*; and Mr Robison most justly adds, that if Newton or Black had so exulted over Des Cartes and Meyer, their countrymen would have concluded they were out of their sences.

The injustice of Lavoisier's behaviour to Dr Black, has perhaps been somewhat overrated by our author. He attempted, indeed, to conceal the very name of the discoverer of latent heat, in his papers upon that doctrine. This appears to have been his mode of proceeding on all such occasions. He seems to have thought, that the variation of an experiment, or the farther prosecution of an idea, gave him a right of property in the whole subject. But we can scarcely consider his well-known letter to Dr Black as very irrefragable evidence of duplicity, when we reflect on the unmeaning complimentary style which all Lavoisier's countrymen adopt upon every occasion. Dr Black was perhaps as little entitled to interpret the expressions of that letter into a profound respect for his original genius, as he would be to infer affection from the ordinary beginning, or submission from the conclusion of the less verbose epistolary effusions of his own countrymen. We must refer our reader, however, to the 'Observations' themselves for a full statement

of the facts upon which Mr Robison's remarks are founded. They certainly throw very considerable difficulties in the way of those who may be inclined to defend the French philosophers.

The discussions which Mr Robison's Notes contain upon various points of modern chemistry, are of inestimable importance to the student of that science. They draw his attention towards the weak parts of that beautiful theory into which the French philosophers have expanded the conclusions sanctioned by experiment; and suggest to him, at every step, the difference between the unsupported and the unquestionable positions of the system. In point of fairness and ingenuity, these discussions are indeed superior to any with which we are acquainted. The new theory has never yet been treated with so much candour and impartiality. Mr Robison is, in fact, only an adversary to the doctrines which are not warranted by induction, or are inconsistent with known facts; and we shall now offer a few observations upon those doctrines, not as a specimen of what our author has given, but as a caution to our readers against that implicit confidence in the universal truth of the antiphlogistic theory, which is derived from an unphilosophical carelessness about the facts, and a predetermined to learn the system synthetically.

Lavoisier and his followers maintain, that the light and heat extricated during the combustion of inflammable bodies, come entirely from the oxygenous gas. Now, to pass over the very weighty objections arising from the desintegration of nitrous salts, objections which have only been got rid of by the most gratuitous explanations, how does it happen that the union of many inflammable bodies, as sulphur and iron, sulphur and lead, &c. produces an ignition (*i. e.* an emission of light and heat) as violent as the union of the same inflammable bodies with oxygen? Is it consistent with the most obvious principles of induction, to attribute the light produced in cases of combustion entirely to the oxygenous gas, when the same bodies are found, in cases of union without that gas, to give out such quantities of light? Light, indeed, attracts oxygen from bodies, and contributes to give it the gaseous form. But the union of light with inflammable bodies is a fact fully as unquestionable, and entitles us as positively to conclude, that part, at least, of the light emitted in combustion comes from them.

Besides, various instances may be given of bodies, confessedly incapable of forming any union with oxygen, giving out light, when heated to a certain point. Salts, and earths, and combinations of the two, as glasses, are easily made red, and even white hot, without any oxydation, or any change whatever of their

their properties, except the expulsion of moisture, and other volatile ingredients in their composition. Other bodies, capable of uniting with oxygen at a high temperature, appear capable of being ignited by a lower degree of heat. Thus linen cloth, when exposed to a heat somewhat higher than that of boiling water, seems, in the dark, to be covered with a blue lambent flame; and yet, when examined, shews no symptom whatever of oxygenation; for it is not in the slightest degree decomposed; and there is no instance of such heterogeneous bodies being oxydized entire.

How does it happen, that a body, admitted to be acid, should contain no oxygen? The Prussic acid is this body. And how comes it, that water, which is so highly oxygenated, has no properties of an acid? To say, as the followers of Lavoisier have done, that hydrogen is not an acidifiable base, is exactly to state the difficulty in another form of words.

How is the deflagration of water, in the following experiment, accounted for, upon any principle in the new theory? If sulphuric acid and oxymuriate, either of potash or soda, rendered as dry as possible, are mixed together, a red and fuming liquor is formed, having somewhat of a nitrous smell, but containing no nitrous acid or nitrous gas. Let a drop of water be projected upon this liquor while the red colour remains, it instantly deflagrates, with a slight explosion. This explains the experiment of triturating sulphur with oxymuriates, and of the explosions sometimes found to attend the mixture of sulphuric acid with those salts, when in a moist state. But how is the water first decomposed, and then recomounded? We can find no explanation of this, even in the doctrine of predisposing affinities, invented for the purpose of overcoming all difficulties.

When a certain degree of heat, without light, is applied to many inflammable bodies, they are vaporized, without oxygenation, decomposition, or flame. Apply a lower temperature, with light, and the vapour burns. Yet, what effect should the presence of light produce, according to the theory of Lavoisier?

A multitude of other facts might be mentioned, all tending to show how unfounded that confidence is which the followers of the new chemistry have reposed in the universality of its powers of explanation. Mr Robison, who states a variety of such facts, acquits Lavoisier of the charge of an unphilosophical readiness to generalize, which has been brought against his followers. But it must be acknowledged, that Lavoisier himself was too fond of a beautiful theory—a system which explained every thing—to observe with sufficient strictness the rules of analytical investigation; and his system of chemistry seems liable, even in the last

last form which he gave it, to all those judicious and philosophical criticisms which the first sketch of it called forth from Dr Black.

We cannot conclude these very general and desultory reflections, without again expressing our obligations to Mr Robison for the high intellectual treat which this publication has afforded us. If any thing could render the present more acceptable, it would be the addition of an index, or a full table of contents.

ART. II. *Le Malheur et La Pitié: Poème, en quatre Chants.* Par M. l'Abbé de Lille, un des Quarante de l'Academie Françoise. Publié par M. de Mervé. Dulaun, Londres, 4to, 1803.

La Pitié: Poème, en quatre Chants. Par Jacques de Lille.
Paris, 1803.

THERE is no living author, we believe, whose works have attained so extensive and so durable a celebrity as those of M. de Lille. It is now upwards of twenty years since the poem of 'Les Jardins' began to be read out of France; and, in the course of that time, it has been translated into almost all the languages of Europe, and been made the subject of criticism and imitation from Warsaw to Naples. A reputation that prevails so universally, and is retained so long, must necessarily be merited; and it would not only be presumptuous, but absurd, to call in question the reality of those excellences, to which the whole European world has borne so unequivocal a testimony. We may be permitted, however, to inquire a little into the peculiar nature of those merits which have met with so general approbation; and to consider, whether they are not attended with any characteristic defects.

It probably will not appear very flattering to a French writer, or to his French admirers, to say, that he has extended his reputation, chiefly by abandoning his national peculiarities, and added materially to the beauty of his compositions by accommodating them to the taste of his neighbours. Yet such, it appears to us, is undoubtedly the case with M. de Lille. He has recommended his works to general perusal, by departing, in a good measure, from the common poetical style of his countrymen; by adopting, freely, the beauties of the surrounding countries, and forming himself upon the model of all that appeared to him to be excellent in the poetry of modern Europe. French poetry, we are inclined to suspect, never had any very sincere admirers out of France. The general diffusion of the language of that people,

the excellence of many of their writings, and their early proficiency in criticism and the *belles lettres*, had indeed given a certain currency to most of their domestic favourites, and spread into the circulation of Europe, whatever had received the stamp of Parisian approbation. But their reception was more owing to the authority by which they were recommended, than to their own powers of universal fascination. Men wished to admire the poems of those, whose prose was in general so delightful; and seldom had courage to set up their own judgement in opposition to the sentence of a tribunal that was for the most part so enlightened. French poetry was read, therefore, and applauded over all Europe, without being sincerely admired. Some pretended to be enchanted with it, and others imagined that they were so; while all the men of letters spoke of it with deference, and condemned, without mercy, all that resembled it in the productions of their own countrymen. Although a poet, who had obtained reputation in France, was not sure, therefore, of pleasing all the rest of Europe, he came before his foreign readers with very considerable advantages. He was certain of being patiently and favourably listened to, and might assure himself, that many would applaud, and that the greater part would be willing to admire. As soon, therefore, as a French poet appeared, who was willing to lay aside the gaudy *costume* of his country, and to accommodate himself to the taste of the other European nations, it was to be expected that his popularity would be at least equal to his merits. It was reserved for M. de Lille to make this experiment; and we are really persuaded, that a very great share of his reputation is to be ascribed to its success.

It is chiefly from the modern poets of England, that M. de Lille has borrowed the peculiarities of his manner. Besides the obvious and avowed imitations of Pope, Addison, Goldsmith, Cowper, and Darwin, that occur in the present publication, there is something in the whole temper and complexion of his compositions, that certainly does not belong to the genuine school of French poetry. The prose of Rousseau and of Florian, may have afforded some instances of it; but if it had a poetical origin, it must have been borrowed from the poetry of England. The great vice of the French poets, was an affected magnificence of diction, and elevation of sentiment, that admitted of no relaxation, and precluded, in a great degree, all that was interesting or natural. The charm of easy and powerful expression was generally sacrificed to the support of a certain sonorous and empty dignity; the picturesque effect of individual description was lost in cold generalities; character was effaced, by the prevalence of one glittering uniform; and high-founding sentiments were substituted for the language

guage of nature and of passion. In this way, almost all the serious poetry of France had come to resemble the declamation of a hired pleader, in which no imitation of nature was so much as attempted; but all kinds of reflections and antitheses were thrown together in a style of affected passion, and false elevation. Every English reader, we apprehend, must have felt how little painting there is in the poetry of France, and how much more it deals in thoughts than in images. It is full of reasoning and ingenuity, -and abounds in all the graces of polite and elegant expression; but there is little that comes distinctly forward to the imagination or the heart; and we are never tempted, for a moment, to believe in the inspiration of the author.

M. de Lille has corrected a great number of these defects, and divested the poetry of his country of a great deal of that artificial stateliness which was so fatal to its pathetic effect. Instead of vague and lofty declamation, he has presented his readers with minute and faithful descriptions of all that was interesting in his subjects; and has impressed them with the feelings he was desirous of communicating, not by running over all the verbs and interjections that were supposed to denote them, but by placing before their eyes a living picture of the situations in which they must arise. In another particular, too, M. de Lille may be considered as an innovator in French poetry, and a follower of the English writers. He is the first, we believe, in that country, who has succeeded in embellishing his compositions with representations of rustic scenery, and rustic virtues and occupations. His predecessors spoke, indeed, of groves and fountains, and paraded their muses, as of old, among thickets and upon lawns; but they spoke of them as they did of the tygers and lions which were found in their company in the writers of antiquity, and neither pretended to detain their readers among them, nor to delineate them with the fulness and precision of realities. M. de Lille has made them familiar, however, with cottages and farms, and rendered current in verse, the whole phraseology of planting and enclosing. He has dwelt, with great feeling and effect, upon the contemplative and innocent pleasures that a rural situation may afford, and has contrived to describe them in language so pure and so elegant, that even the Parisians have perused them without derision or disgust. He has not only ventured to speak of the country, but has had the courage to take an interest in its inhabitants. The older French poets were utterly unacquainted with cottagers and husbandmen. Their only rustic personages were shepherds and shepherdesses, who asked for nothing but sympathy, and laboured at nothing but singing. M. de Lille has introduced the real peasant and labourer to the acquaintance of his

his readers; has represented their occupations, their pleasures, and their virtues; and has solicited relief for their sufferings, and respect for their services. All this is familiar to English poetry; but it was new to that of France.

M. de Lille, finally, is a much greater philanthropist than any of his predecessors we remember; and betrays, throughout, a sort of sentimental tenderness, and delicacy of feeling, that did not enter before into our conception of a French poet. His morality is perfectly pure; and there is not a page in his writings, in which he does not labour to enforce it. There is no poetry, with which we are acquainted indeed, that is so uniformly and zealously moral.

But though, in these and some other particulars, M. de Lille bears a much greater resemblance to the poets of England, than to those of his own country, we must not imagine, by any means, that he has entirely renounced his national taste, or conducted himself in every thing according to our notions of propriety. In examining more minutely the structure of the poem before us, we shall have occasion to point out several passages, and turns of expression, that are certainly very foreign to our habits of composition. Nor are we, on the other hand, to conceive that M. de Lille is a writer of a warm and enthusiastic imagination, who has been hurried into a disregard of his national models, by the impulse of a bold and creative imagination, or from any ardour of temperament that disdained the controul of authority. He is, in truth, a great deal more distinguished for correctness and delicacy of taste, than for original or inventive genius; and, while he has done us the honour of preferring our authors to his own, he has not copied any thing that could not be justified by classical usage, or the most rigorous canons of criticism. He has prudently abstained, therefore, from attempting to imitate those higher graces of composition, which no imitator is ever permitted to attain; and has confined himself to those accomplishments of fine writing that may always be reached by the union of elegant taste and diligent application. Although most of his writings, therefore, recall to us the general manner of English poetry, we shall be but seldom reminded of the loftier flights of Milton, the luxuriant tenderness of Thomson, or the fairy fancy and magical facility of Shakespere. We shall find more of the pointed polish and elaborate elegance of Pope, the dignified and correct tenderness of Goldsmith, and the dazzling amplifications of Darwin. M. de Lille, in short, is a refined, studied, polite, and accomplished writer, who never forgets himself in the ardour of composition, and seldom lets the reader forget him; who culls out the nicest phrases, and most unexceptionable images; and oftener reminds

us that the description is beautiful, than he imposes upon us with the belief of its reality. He belongs to that class of poets that may be said to be of *secondary formation*, and that could not have existed, if a hardier race had not existed before them. He does not wander in the pathless places of Parnassus, nor gather flowers where no poetical foot had ever trodden before him. He has the praise of judicious selection, artful disposition, and dignified imitation. He has reached the eminence upon which he stands, by following with attention the footsteps of those who have mounted still higher. He has become a poet by reading and patient discipline; and probably could not have written ‘les Jardins,’ if he had not begun with a translation of Virgil.

The subject of M. de Lille’s poems do not naturally carry him into the higher regions of poetry, and he does not seek for occasions of elevation. The art of laying out pleasure-grounds, and of passing one’s time agreeably in the country, might be discussed, no doubt, without trespassing on the provinces of the Epic or the Tragic writer; but admitted, at the same time, of a great deal of pathetic imagery, and a great variety of embellishment. It would be improper to enter upon any particular criticism of these poems, in this place; but there is one remark suggested by them, which applies so obviously to the general character of M. de Lille’s genius, that no apology can be necessary for its insertion. The greater part of the pleasure derived from poetical representations of rustic scenery and occupations, consists in a pleasing illusion of the imagination, that carries us back to the golden age of the poets, and soothes us into a temporary forgetfulness of all the vice and the artifice, the cares and perplexities of real life. There is some period in every man’s life, in which he has fancied that happiness and innocence were to be found among cottages and pastures, and desired to retire from the bustle and corruption of the world, to some elegant and simple seclusion; and, as often as spleen or disappointment turn back his thoughts to this vision of his childhood, the dissipation and constraint of a city life always present themselves as objects of scorn and detestation. Whatever tends, therefore, to recall our thoughts to those incongruous objects, is misplaced in such a poem; it dispels the illusion, by the help of which alone, such themes are capable of pleasing, and distracts the imagination from the train of images that engrossed it. Now, this fault, which is not chargeable either upon Virgil or Thomson, M. de Lille has certainly committed. He begins his encomium on a country life, with some critical remarks on the regulation of private theatres, and entertains his readers with a long enumeration of pompous villas, and great princes that inhabit them. He is constantly interspersing sarcastic

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and pointed reflections upon the dissipated and luxurious, and has composed the greater part of his poem in such an epigrammatic and courtly style, as is altogether unsuitable to the subjects upon which he is employed. Although enamoured of rural objects and employments, he seems anxious to convince his courtly readers, that he is as familiar as they can be with the language and occupations of the polite world ; and that, though he chooses to shew his sensibility to obscure and sentimental pleasures, he possesses all the urbanity and accomplishments of a gentleman and a courtier. His whole style is infected with this peculiarity ; he cannot avoid an ingenious turn, or a brilliant antithesis ; and instead of the simple and enthusiastic votary of nature and virtue, he frequently appears like a fine gentleman paying compliments to the sylvan goddesses.

Upon the whole, we think that the genius of M. de Lille is rather of a pleasing, than a powerful character ; and that the delicacy of his taste, and the elegance of his language, are a good deal more remarkable, than the force of his imagination, or the originality of his invention. He will be relished most, we conceive, by those who admire rather the art, than the nature of poetry ; and though he will give delight to almost all who have been trained to the admiration of elegance, by the habitual study of fine writers, he will scarcely ever be found speaking in that universal language, by the use of which, Shakespere has found his way, from the closet of the student, into the workshops of our manufacturers, and the cottages of our peasantry. It is now proper, however, to leave those general observations upon the poetical character of the author, and to inquire how he has acquitted himself in the publication now before us.

There is something singular in the history of this publication. M. de Lille emigrated from France soon after the beginning of the Revolution, and took refuge, several years ago, in England. There he composed that edition of the present poem, the title of which stands first at the head of this article, and sent the manuscript to be printed, under the care of his friend M. de Mervé. While the work was going through the press, however, in the beginning of the present year, the impaired state of his health, as we are informed, made him yield to the solicitations of the Consular cabinet, and consent to return to his native country. Soon after his establishment at Paris, and before the London booksellers had been able to complete the first publication, they were surprised to find, that an edition had been published in France, under the immediate inspection of the author ; in which several passages that might have given offence to the new government, are suppressed,

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and large additions are made, in a style more courtly and ingratiating. We shall take notice of the most considerable of these variations, as we go along; only premising, in this place, that the largest of the retrenched passages related to the atrocities that were perpetrated in the late invasion of Switzerland, and that the most remarkable addition consists in a congratulatory address to the French people, upon the re-establishment of their religion, and the restoration of peaceful pursuits. The praise and commendation of the Royal family is retained, without any qualification. The London edition, it may be observed, contains, in the notes, all the additions that have been made in that of Paris.

The plan of the poem, we cannot help thinking, is somewhat scholastic and formal. The subject is Pity—or the active principle of benevolence towards the distressed: and, to illustrate the operations of this principle with the happiest poetical effect, the author has been able to bethink himself of no better plan, than to begin with describing the duties that are owing to the misfortunes of horses, dogs, and other domestic animals: then, by a cautious and gradual ascent, he proceeds to the miseries of slaves and hired servants; and at last arrives at the distresses of tallow-citizens, parents, and friends, with their corresponding sympathies, and appropriate degrees of compassion. This scale of misfortune and pity occupies the first canto. The second treats of the ‘Pity of Governments,’ and has, for its subject, the case of debtors, convicts, and all manner of sick and unhappy persons, in public hospitals, prisons, or garrisons. The two last cantos are consecrated to the miseries of the Revolution; the third containing a detail of the objects of pity, during the reign of terror, among whom the Royal sufferers hold the most distinguished place; and the fourth treating of those particular cases of revolutionary distress, that arose from the confiscation of property, and the expatriation of the individual. In the adjustment of this plan, there is certainly no great artifice of method: the parts do not naturally suggest each other, nor are they so appropriated to their places, as not to be interchanged without obvious disadvantage. This, however, is partly the fault of the subject: a poem upon pity must necessarily consist of a series of pictures and illustrations; and the author can only be blamed for having selected them injudiciously, or for having subjected them to a fantastic and unnatural arrangement.

The first canto is almost entirely engaged in the most hopeless common-places of poetry. Upon the subject of cruelty to animals, the sage of Samos is brought in, with his usual *cortege* of lowing oxen, and bleating sheep; and the oration which Thomson imitated from Ovid, is here very elegantly translated from Thomson.

Thomson. The iniquity of horse-racing is exposed in a very long homily, and the abominations of the slave-trade are detailed in the accustomed manner. There is some magnificent versification in all this; but there are also many passages, which, to an English ear at least, appear extremely tame and awkward. The subject of animal misery is announced, for instance, in these lines, which we really supposed at first to relate to the peasantry.

‘ Vous donc, soyez d’abord le sujet de mes chants,

 O vous, qui fécondez, ou qui peuplez nos champs ! ’ p. 5.

There is something miserably unsuccessful, and almost ridiculous, in the following attempt to give great interest and energy to a well-known anecdote.

‘ Tel ne fut point Hogart : sa main compatissante

Traça des animaux l’histoire attendrissante.

De là, ce noble élán, ces admirables mots

D’une âme généreuse et sensible à leurs maux,

Qui, voyant des coursiers torturés par leur maître,

S’écrie : “ O cœur barbare, homme dur, qui peut-être

“ Au sein de ton ami plongerois le poignard,

“ Tu n’as donc jamais vu les peintures d’Hogart ! ” p. 9.

The transition to the horrors of the slave-trade, is made in this intolerable couplet.

‘ Tairai-je ces enfans de la rive Africaine

 Qui cultivent pour nous la terre Américaine ? ’ p. 14.

One of the most striking instances of a taste that is certainly foreign, and, we are almost persuaded, is also false, occurs in the beginning of the story of Fidelia, which M. de Lille has versified from one of the papers of the Spectator, with great elegance and great exactness. Addison had called his heroine a beautiful young woman, and had said that she was beloved by a young man of great merit. The French academician thus improves these simple expressions :

‘ Au ciseau de Scopas, même au pinceau d’Apelle

La Beauté que je chante eût servi de modèle.

Un amant l’adoroit, tel que le Dieu d’amour

L’eût choisi pour charmer les Nymphes de sa cour.’ p. 17.

In a lamentation over his own blindness, the general idea of which is evidently borrowed from Milton, M. de Lille goes out of his way to make the following unnecessary attack on the political principles of that great man :

‘ Je n’eus ni ses talens, ni sa lâche foibleffe :

Admirable poète et mauvais citoyen,

Il outragea son maître, et j’ai chanté le mien.’ p. 20.

We cannot help wishing, that, among the passages which are suppressed in the edition of Paris, M. de Lille had had the grace

to expunge this also. We do not know with what propriety the appellation of ‘lâche foiblesse’ can be applied to the stern and unbending republicanism of Milton; but we are persuaded, that he would not have purchased the protection of his opponents by any weak compliances; and that he would never have suppressed or altered any passage in his immortal poem, merely because it might have given offence to the Royal censors of the day.

The canto ends with a pleasing, but somewhat puerile story, of the virtuous Mopsus, whose cottage was burned down, and the sensible Dormond, who secretly contrived to build him another, so very like the old one, as to produce an amusing surprise.

- Ses murs, vicillis par l'art, offrent même coup d'œil ;
Semblable en est l'entrée, et semblable est le seuil.
C'est leur même buffet, c'est leur modele table ;
Nombre égal d'animaux a peuplé leur étable.
Et jusque dans leur cour, un nombre égal d'oiseaux
Est perché sur les toits, ou nage dans les eaux.
Seulement leur vieux coq, qu'avoient sauve ses ailes,
Ne reconnoissoit plus ses amantes nouvelles. —
- De ses hochets perdus, son unique trésor,
Seul, leur plus jeune enfant se désoleoit encor ;
On apaise ses cris. Cependant la chaumière
A repris du travail l'activité première,
Les roseaux avec art s'enlacent aux roseaux ;
J'entends tourner la roue et rouler les fœseaux.’ p. 27. 28.

These lines are certainly beautiful; and the incidents, though somewhat too ingeniously imagined, must be allowed to be natural, and strictly in harmony with the whole design.

The Second canto is, on the whole, rather dull. There is nothing so easy, and nothing so tedious, as dissertations on the miseries of captivity, war, sickness, and the other corporated plagues of human life. The picture of the prisoner is copied, or rather exactly translated, from Cowper’s fine sketch of the Bastile: only the striking circumstance of his seeking to wear out the tedious time by counting the iron studs on his door in all directions, and beginning again when the calculation is completed, is omitted by the French poet, as too whimsical, and too little dignified, for his elaborate couplets. In return, however, he has added to the description of the English poet, by informing us, that ‘the vault is the prisoner’s sky, and the walls his horizon.’ We have reason to be proud, we think, of the difference in the national taste of the two writers.

M. de Lille is very poetically angry at the injustice of those laws that condemn a debtor to imprisonment; and is for allowing maniacs to range among flowers and fountains, instead of shutting them up in solitary dungeons. He is eloquent, moreover, upon

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the establishment at Botanybay, and declaims against solitary confinement as a piece of unnecessary cruelty. The highest poetical talents would scarcely have selected for their theme such vulgar prejudices, as must be dissipated by the lowest degree of political information. The prison scenes are closed with a translation of Dr Darwin's panegyric upon the celebrated Howard, in which M. de Lille approaches nearer to his original than in any of his other imitations; yet there is something decidedly French in this classical introduction—

‘ Qu'on ne me vante plus les malheurs vagabonds .

De ce roi voyageur, père de Télémaque,’ p. 34.

in the description of dungeons—

‘ Habités par la mort, et pavés d'ossements.’ p. 35.

and in the idea of a prisoner finding the embraces of his wife and children a pleasant exchange for his fetters.

In the description of the hospitals, there is a great deal of strong painting. The following lines, however, have too much of the tone of satire for the place in which they occur.

‘ Là, le long de ces lits, où gémit le malheur,
Victime des secours, plus que de la douleur,
L'ignorance, en courant, fait sa ronde homicide,
L'indifférence observe, et le hasard décide.’ p. 37.

In this canto, about 150 verses, descriptive of the outrages that were perpetrated by the French armies in their last invasion of Switzerland, are suppressed in the Paris edition: and a part of the description is applied to the case of civil war in general. Though we by no means approve of the motive which has dictated this retrenchment, we cannot say that the poem has suffered any great injury from it. The lines in question contained an overloaded and diffuse description of burning and butchery, Echo repeating groans, and Pity converted into revenge. There is one couplet we should have been sorry to lose, describing that inglorious selfishness,

‘ Qui, façonnant au joug les peuples abattus,
Sans oser les forfaits, assouplit les vertus.’

Of the lines that have been retained and applied to a less offensive subject, the following are among the most powerful, and afford a good specimen of that elaborate and artificial style in which M. de Lille seeks for force in antithesis, and sublimity in exaggeration.

‘ De la vierge à genoux leur rage ouvre les flancs,
S'irrite sans obstacle, égorge sans colère,
Et, s'il n'est teint de sang, l'or ne fauroit lui plaire.
Tout ce qui du passé gardoit le souvenir,
Tout ce qui promettoit un bonheur à venir,

Tout ce qui du présent accroît la jouissance,
 Les monumens des arts, ceux de la bienfaissance,
 Tout subit leur fureur : s'il offre un trait humain,
 L'airain trouve un bourreau, le marbre un assassin.' p. 47.

The canto ends with the war of La Vendée, and an exhortation to peace and reconciliation, which the author puts into the mouth of Pity.

The Third canto, which relates entirely to the famous events of the Revolution, treats, of course, of a subject with which every one is already familiar and disgusted. The atrocities of the days of proscription, and the circumstances of horror which accompanied the fate of many eminent individuals, can no longer be read with curiosity, and could scarcely ever be read with pleasure. They have been sounded so long in the ears of all Europe, that few people can now be found to listen to them ; and we doubt if even the charm of M. de Lille's versification will carry many readers through the uniform and disgusting details with which this part of his poem is charged. We have the detations and distrust, and the *noyades*, and the *fusillades*, and even the civic marriages, (which he calls, very simply, ' hymens qu'on abhorre,') and all the terrible *etcetera* of revolutionary enormities, detailed and described at full length in this canto. We are told, moreover, that Robespierre and Danton have at last gone ' to terrify the devils with their horrible countenances in hell ;' and immediately after, the poet comes with a violent complaint against Nature, for abetting all those crimes ; and is very angry with the fire for burning the houses of the loyalists, and with the earth for being a receiver of their dead bodies. We insert this extraordinary passage.

' Que dis-je ? la nature, ô comble de nos maux !
 De tous ses éléments seconde nos bourreaux.
 Dans leurs cachots impurs l'air infecte la vie ;
 Le feu dans les hameaux promène l'incendie ;
 Et la terre complice, en ses avides flancs,
 Recèle par milliers les cadavres sanglans.' p. 63.

This may be thought very fine in M. de Lille ; but we are certain that it would appear absolutely childish and absurd in any English writer.

After going over the melancholy fate of M. de Brissac, Mad. de Lamballe, and some other victims of less note, the author comes to the misfortunes of the Royal family. It is impossible to read, in any narrative, the history of the outrages and barbarity with which the unfortunate Louis was treated, without feeling compassion for his sufferings, and indignation towards his persecutors. But we are not sure if an inflated rhetorical representation, such as that of M. de Lille, is not, upon the whole, less impressive

impressive than a plain prose narrative. The latter has more the air of truth and authenticity ; and where the reality is so tragically interesting, there is no room for fiction or eloquence to display their illusions. Besides, the catastrophe is so well known, and presses so constantly upon the mind, that the detail of minor sufferings produces scarcely any effect, and excites but a small share of our sympathy. When Mr Burke published his *Reflections*, the account of the return from Versailles produced an extraordinary interest ; but after the blood of Louis and his consort had flowed upon a public scaffold, we do not think that it was very judicious in M. de Lille to dwell upon it at so great length in this canto. The whole progress of the King's trial, deposition, condemnation, and death, are then narrated in the same minute declamatory style ; and a passage of at least 200 lines, reads exactly like a versification of some turgid and sonorous funeral oration. In one place he breaks out into this dignified exclamation,

‘ Noirs esprits des Enfers, quel conseil ténébreux
Inventa, dites-moi, ces traitemens affreux ? ’ p. 74.

At another stage of the proceeding, it is impossible, we are told, that any thing can be worse ; and Pity is exhorted to dry her tears. Then something worse is announced, and the poet will not believe it ; and yields at length, with great agitation, to the dreadful certainty ! In a story so well known, this is very injudicious trifling. When he comes to the execution, he breaks off in this cold and affected manner :

‘ Ces tableaux font horreur : et je peins la Pitié ! ’ p. 77.

And then he concludes in the very style of a common-place preacher, by recollecting that the Royal Martyr is no object of pity ; and by telling the angels to take their lyres of gold, and receive him with triumphal palms ! This we cannot help thinking a little profane ; but the following lines, in which he lets himself down so familiarly to his mortal subject, appear to us to be still worse.

‘ Mais, d'où vient tout à coup que mon cœur se resserre ?
Hélas ! il faut des cieux revenir sur la terre !
. Louis en vain affiste aux célestes concerts ;
Les cieux sont imparfaits, son épouse est aux fers.’ p. 77.

The successive immolation of the Queen, Madame Elisabeth, and the Dauphin, is then narrated in the same style, and with equal heaviness and labour of composition. The canto terminates with an encomium on the heroic fortitude with which a multitude of beautiful women encountered a public death in that period of distraction. Of those lovely victims, he says, with more prettiness than pathos,

‘ Près d’elles du trépas l’aspect est moins affreux.
 La beauté, sur la mort exerçant son empire,
 L’adoucit d’un regard, l’embellit d’un sourire.’ p. 90.

The three virgins of Verdun, who were sacrificed together, are then celebrated in the same manner; and the canto is closed with the following proposal for commemorating their fate, by an annual festival in their honour. M. de Lille, who really does not succeed at all in tragical descriptions and scenes of blood, resumes all his powers of fascination, in sketching out the pastoral imagery and rural innocence of this romantic solemnity. The following verses, which are in the true taste of ‘ les Jardins,’ came upon us with a refreshing sweetnes after wading through so many oceans of blood.

‘ Mais s’il est quelque lieu, quelques vallons déserts
 Epargnés des tyrans, ignorés des pervers,
 Là, je veux qu’on célèbre une fête touchante,
 Aimable comme vous, comme vous innocente.
 De là j’écarterai les images de deuil,
 Là, ce sexe charmant, dont vous êtes l’orgueil,
 Dans la jeune saison reviendra chaque année,
 Consoler par ses chants votre ombre infortunée.
 “ Salut, objets touchans,” diront-elles en chœur,
 “ Salut, de notre sexe irréparable honneur !
 “ Le temps, qui rajeunit et vieillit la nature,
 “ Ramène les zéphirs, les fleurs et la verdure ;
 “ Mais les ans dans leur cours ne rameneront pas
 “ Une vertu si rare unie à tant d’appas,
 “ Espoir de vos parents, ornement de votre âge,
 “ Vous eûtes beauté, vous eûtes le courage,
 “ Vous vîtes sans effroi le sanglant tribunal,
 “ Vos fronts n’ont point pâli sous le couteau fatal.” —
 —“ Adieu : quand le printemps reprendra ses guirlandes,
 “ Nous reviendrons encor vous porter nos offrandes ;
 “ Aujourd’hui recevez ces dons consolateurs,
 “ Nos hymnes, nos regrets, nos larmes et nos fleurs ! ” p. 92. 93.

The last canto is, at least in the London edition, very much in the style of the preceding one, and might have formed a continuation of it, indeed, if it would not have been too long. It proceeds in a style, which we are rather surprised that the Consular censors have not corrected, to enlarge upon the evils that France has suffered by the destruction of her royalty, and to expatiate upon the absurd appearance that many of her new rulers make, in situations so opposite to their original. The state of society appears, says he, very childishly, as much disordered as a wood would do with its branches in the ground, and its roots in the air.’ The unfortunate emigrants are then commemorated in

a passage, that has borrowed the greater part of its beauties from the *Deserted Village*, and are compared to the Israelites, during their captivity in Babylon: upon occasion of which simile, a very beautiful paraphrase of the 137th psalm is inserted. After this there occurs, in the London edition, a very long passage, crying out against the confiscation of property that took place, and asking 'the god Termes' what he thinks of those terrible doings. The poetical merit of these 150 lines is not great; but M. de Lille, when at Paris, probably repented him in a particular manner of the following:

— ‘ Mais j’entends des flatteurs
 Démentir lâchement mes vers accusateurs.
 “ Tout changé,” dit-on, “ et le pouvoir répare
 “ La longue iniquité d’un régime barbare.”
 Sans doute : le François, malheureux dépouillé,
 Peut rentrer sur un sol de carnage souillé,
 Peut errer sur les murs habités par ses pères,
 Voir ses blés moissonnés par des mains étrangères,
 Et, par ses souvenirs déchiré de plus près,
 Joindre à tant d’autres maux le tourment des regrets.
 Ah ! quel exil affreux égale ce supplice ! ’

After this, there comes a very animated address to the kings and rulers of the world, in behalf of the emigrating royalists. Though this is perhaps the best political passage in the poem, it is too long to be extracted. Our readers may judge of the style of it from the following verses :

‘ Non, non : le temps n’est plus, où la soumission,
 D’un amour idolâtre heureuse illusion,
 Environnoit le trône : une raison hardie,
 De ce vieil univers nouvelle maladie,
 Calcule ses devoirs, et discute vos droits ;
 Sous la pourpre avilie interroge les Rois,
 Déenchaunte l’esprit, et paralyse l’âme ;
 Du feu chevaleresque éteint la noble flamme ;
 De l’état social défordonne les rangs.’ p. 102-3.

At this period, the poet seems to have recollect ed that he was wandering a little from the proper subject of his poem; and to make amends, he suddenly bursts out into a new invocation to Pity, declares that no other subject is worthy of his muse, and copies two long passages from Virgil to show, in general, how much interest the language of compassion can give to a poetical composition. Having performed this evolution in honour of ‘ *La Pitié*,’ the poet wheels round again to his revolutionary dissertation, and commemorates the hospitality of diverse princes and nations towards the unhappy emigrants who had implored their protection. The compliment to England is particularly full and flattering: we should

be inclined to suspect that the following verses will not be very popular at Paris :

‘ Tes lois font la raison ; tes mœurs font la sagesse,
Tes femmes la beauté, leur discours la candeur,
Leur maintien la décence, et leur teint la pudeur,
Tu joins les fruits des arts aux dons de la fortune,
Le tonnere de Mars au trident de Neptune.
Tantôt, foulant aux pieds l’athée audacieux,
C’est Minerve s’armant pour la cause des Dieux ;
Tantôt, fille de mers, belle, fraîche et féconde,
C’est Vénus s’éllevant de l’empire de l’onde.’ p. 110.

After this, there is introduced a long romantic episode, containing the adventures of an interesting emigrant, who, in his wanderings over the great deserts of the world, fortunately stumbles upon the retreat of another emigrant, who had established himself, like Robinson Crusoe (it is the author’s own simile) with his wife and family in the solitary woods of America, and who detains his ancient Parisian friend to make their society more comfortable. There is some pretty landscape painting in this part of the work ; but the story is spoiled by an attempt at too great refinement ; and we could scarcely help laughing, when we were stopped, in following the course of this heart-sick exile, to be informed that he was a curious botanist, and that

‘ De nombreux végétaux, dans sa course intrépide,
Avoient déjà grossi son porte-feuille avide.’

A part of this episode, it seems, was written by M. de Lille entirely from his own invention : but he was afterwards delighted to find that such an incident had actually occurred, and modelled the conclusion of it according to authentic information.

From this point, there is scarcely any resemblance between the London and the Paris editions. The former contains a long eulogium upon the army of Condé, and on the princes of the blood royal ; an address to the author’s ancient patron, le Duc d’Artois ; and a caution to the emigrants, not to be tempted back to France by the insidious promises of the new government. The French copy leaves all this out, and concludes with a congratulatory address on the restoration of civil order and religious rites, and on the return of security and peace after so long a tempest. In point of poetical beauty, we are sorry to say, that the latter edition appears to us to have the advantage. There are some fine expressions of a loyal devotion, no doubt, in the address to the princes ; but the whole passage is infected with so much pedantry, and is composed in a taste so decidedly French, that no English critic can be expected to show it much mercy. What can be said, for instance, for such a cold scholastic conceit as the following ?

Qu'on

‘ Qu'on ne me vante plus ce triple Géron
 Dont trois âmes mouvoient la masse épouvantable :
 J'aime à voir, surpassant les récits de la fable,
 Un même esprit mouvoir trois héros à la fois.
 Condé, Bourbon, Egheien se font d'autres Rocroys. ’

But the circumstance that gives a decided superiority to those verses in which M. de Lille must be admitted, we are afraid, to have recorded his own desertion from the cause of his patrons, is the singular adaptation of the subject to his peculiar powers of description. He is not formed by any means for recording deeds of blood, or scenes of terrible contention ; but in the elegant and touching delineation of rustic scenery and innocent occupations, he is perhaps without a rival among the writers of modern Europe. We have no hesitation in saying, that the following verses upon the restoration of religion, which do not appear in the text of the Loudon edition, are by far the most beautiful in the whole poem :

‘ Je les revois enfin, ces tribunaux, où Dieu
 Ecoute du remords l'attendrissant aveu ;
 Ces vases du Baptême, où les chefs des familles
 Viennent purifier et leurs fils et leurs filles.
 Mme de vos clochers l'airain consolateur,
 Que pour un vil profit un bras profanateur
 Fit descendre à leurs pieds, remonté vers leur faïte,
 Du patron du hameau proclame encor la fête.
 Il vous appelle encor aux chants religieux,
 Qui montent de la terre à la voûte des cieux ;
 Au sacrifice auguste, à la sainte tribune,
 Ou l'orateur chrétien console l'infortune ;
 Demande encor des vœux pour les mortels souffrants,
 Pour l'enfant nouveau-né, pour les vieillards mourans ;
 Guide encor le berger, errant dans les campagne,
 Qu'attendent ses enfans et sa chère compagne,
 Qui, parmi les frimas, égaré dans la nuit,
 Béçnit, en avançant, le son qui le conduit,
 Et, sur le coq doré, l'honneur de son village,
 Vers le toit paternel dirige son voyage.’ p. 124-5.

We may add the following charming description of a vernal festival in the country :

‘ Et, des que Mai sourit, les agrestes peuplades
 Reprennent dans les champs leurs longues promenades,
 A peine de nos cours le chantre matinal,
 De cette grande fête a donné le signal,
 Femmes, enfans, vieillards, rustique caravane,
 En foule ont déserté le château, la cabane.
 A la porte du temple, avec ordre rangé,
 En deux files déjà le peuple est partagé,

Enfin,

Enfin, paroît du lieu le curé respectable,
 Et du troupeau chéri le pasteur charitable.
 Lui-même il a réglé l'ordre de ce beau jour,
 La route, les repos, le départ, le retour.
 Ils partent : des zéphirs l'haleine printanière,
 Souffle, et vient se jouer dans leur riche bannière.
 De leurs aubes de lin, et de leurs blancs surplis,
 Le vent frais du matin fait voltiger les plis ;
 La chappe aux bosses d'or, la ceinture de soie,
 Dans les champs étonnés en pompe se déploie,
 Et, de la Piété, l'imposant appareil
 Vient s'embellir encore aux rayons du soleil.
 Ils marchent : l'aubépine a parfumé leur route ;
 On cotoie en chantant le fleuve, le ruisseau ;
 Un nuage de fleurs pleut de chaque arbrisseau ;
 Et leurs pieds, en glissant sur la terre arrosée,
 En liquides rubis dispersent la rosée.
 On franchit les forêts, les taillis, les buissons,
 Et la verte pelouse, et les jaunes moissons.
 Quelquefois, au sommet d'une haute colline,
 Qui sur les champs voisins avec orgueil domine,
 L'homme du ciel étend ses vénérables mains ;
 Pour la grappe naissante et pour les jeunes grains,
 Il invoque le ciel.—
 O riant Chanonat ! ô fortuné séjour !
 Je croirai voir encor ces beaux lieux, ce beau jour,
 Où, fier d'accompagner le saint pèlerinage,
 Enfant, je me mêlois aux enfans du village ! p. 125—9.

Upon the whole, we think this poem decidedly inferior, in point of interest and beauty, to either of M. de Lille's performances upon rural subjects. His diction and versification, indeed, are almost uniformly harmonious and elegant : but he wants simplicity and force for the higher departments of poetry, and commonly falls into a style of declamatory exaggeration and disorder, whenever he abandons his old and appropriate subjects. ‘Les Jardins,’ we have no doubt, will long be admired over all Europe : but M. de Lille must not expect to go down to posterity as the poet of the Revolution.

ART. III. *Traité de Mineralogie.* Par le Citoyen Haüy, en Cinq Volumes, dont un contient 86 Planches : à Paris, an 10, (1801.)

FROM its intimate dependance on chemistry, mineralogy has profited extensively by the recent discoveries in that science. The composition of minerals has been illustrated by ingenious and delicate analysis, and the number of simple substances has been increased by the discovery of new earths and new metals. The same

same accuracy of research that has enlarged the number of components, has diminished the estimated number of compounded bodies, by proving the frivolity of many superficial distinctions which had been regarded as specific, and by establishing precise criteria of essential differences.

The advance and amplification of the science has necessarily rendered every systematic work obsolete. The efforts by which the strenuous mind of Linnæus endeavoured to pierce the darkness in which mineralogy was previously enveloped, now appear ill directed; and though the sagacity of Cronstedt, and the acuteness of Wallerius, may continue to claim our admiration, he who would attempt to reconcile the modern discoveries with their systems or arrangement, would find himself involved in the most inextricable confusion. Yet, since their time, almost all the systems of mineralogy which have issued from the press have concurred in retaining the greater part of their defects, and contributed to perpetuate error by vicious arrangement and inaccurate description. The Germans have, for the most part, contented themselves with pillaging and mutilating the lectures of Werner; and the other nations of Europe have generally been satisfied with doing into their respective languages the Tuetonic lucubrations. By this transmutation, we cannot say that they have generally improved. Diffusion has become prolixity, obscurity unintelligible, the old blunders have been religiously retained, and an innumerable host of new absurdities has been engendered.

A treatise on mineralogy, exhibiting a correct view of the present state of our knowledge, was therefore a most important *desideratum* in this department of science; which the present publication of M. Häüy has done much to supply. His theory of crystallization has been in some degree previously communicated to the public by his papers in the *Journal des Mines*; and its singular ingenuity and utility must have been universally perceived. The same theory is now presented in the most complete form; enriched with every subordinate illustration; applied to the investigation and description of minerals with infinite dexterity; and combined with a judicious selection of all the mineralogical facts which have been previously published, or that may have occurred to his own observation, or to his colleagues in the *École des Mines*; from whose generous contributions, and industrious exertions, his volumes have derived additional value.

From these extensive investigations has resulted a treatise, in which mineralogy is exhibited at least in a new form, and a system is delivered, differing from all that have preceded it, in general arrangement, individual division, and nomenclature. Before we can determine, whether these extraordinary innovations are entitled

entitled to our unqualified approbation, it is necessary to inquire, whether they were actually called for by the errors of the prevailing systems, and whether they furnish proper remedies for acknowledged defects.

From the uncertainty and obscurity attending every infant science, the determination of the mineralogical species has always been a subject of dispute. The operation of no general principle being recognised, varieties have been wantonly constituted into species from the most frivolous and superficial differences, and the most opposite and discordant substances have been violently united from fancied similitudes. Though the prodigious improvements of analytic chemistry have thrown a strong and steady light on some of the most obscure branches of mineralogy, its assistance is not adequate to the determination of every ambiguous point; and chemistry itself is even yet too much in its infancy, for its decisions to be always considered as an authority from which there is no appeal. By the means of analysis, the combinations of earths and acids have been fully disclosed; the mixtures of metals, and the results of their union with acids, gases, and sulphur, have been satisfactorily developed: but the combinations of earths with earths, yield results nearly similar from substances of the most striking dissimilarity. In mineralogical character, and in the analysis of different specimens of the same mineral, as far as other tests can determine its identity, a variety of composition has been detected no less mortifying than unexpected. Till the complicated operation of affinities is more perfectly understood, and we have learnt to correct by compensation the errors they necessarily create, we must not implicitly rely on indications that may be fallacious. We must endeavour, therefore, to find some other criteria that may confirm the authority of analysis where its march is assured, and its results satisfactory, and may serve as guides where its steps are faltering and irregular.

The precision of *crystalline forms* has not escaped the attention of mineralogists; and they have not been wanting in their endeavours to avail themselves of it in distinguishing species. Linnaeus, who first engaged in this inquiry, was followed by Bergman, whose labours tended greatly to its advancement; but it was reserved for Romé de Lille to enlarge the hitherto narrow limits of this branch of science, by estimating angles with precision, and deducing all crystals from the modification of a few primitive forms. Though often successful in explaining the origin of the most complex secondary forms, by means of the imaginary truncations and bevellings of a simple solid, the immense industry and great sagacity of this last inquirer were frequently baffled,

baffled, and he was reluctantly obliged to suppose that some minerals possessed more than one original form, from which their modifications were deduced. However necessary such a conclusion might appear, it was evidently inadmissible, without supposing a deviation from that uniformity which is invariably found in the works of nature; and even if the system of Romé de Lille had been rescued from this mortifying concession, it would still have been wholly unfit for the determination of minerals by their crystals, as a few simple solids would have been esteemed the common origin of numerous substances most essentially distinct.

It was first observed by the truly ingenious and scientific Mr Keir in his Chemical Dictionary, and afterwards repeated by Bergman in his Opuscula, that the fragments of *calcareous spar* were invariably rhomboidal. These philosophers, however, pushed their inquiry but little farther. About the same time, though without being informed of their previous observations, the same fact occurred to M. Haüy. Upon his inquiring mind, it seems to have made a more powerful impression, and he immediately extended the investigation. He found that every variety of calcareous spar yielded, on breaking, rhomboidal fragments, and was only divisible in directions parallel to the sides of these rhomboids; and that, from whichever of the diversified crystals of this substance the rhomboid was derived, its angles were invariably the same. He found that *fluate of lime* yielded, by mechanical division, a nucleus which was invariably a regular octahedron. That from sulphuret of lead, he always obtained a cube; from sulphuret of zinc, a dodecahedron; and that from every crystal susceptible of mechanical division, a solid might be extracted that was common to all the crystallized varieties of that substance. In many cases, the division was performed with accuracy and facility; the surfaces of the solid obtained were even, and sometimes brilliant; parallel to its sides, it was again divisible with equal ease; and solids perfectly similar were generated, till they became so small as to elude the observation of our senses; but every attempt to divide, except in directions parallel to the sides originally obtained, was ineffectual, or produced only an irregular fracture. He also found, that in many instances, where the attraction of aggregation was so powerful as to defy his efforts to extract this nucleus perfect on every side, it was still capable of being developed, in certain directions, with sufficient accuracy to enable him to detect its form, and appreciate its angles.

By a copious and direct induction, he was enabled at last to ascertain this important fact, that every mineral possesses a *form*, on which all its diversities of crystallization are dependent; since this form,

form, and this only, can be extracted with equal facility from them all, however they may be disguised by apparent dissimilarity. The crystals of minerals not unfrequently presented this form; and all deviations from it appeared to have been produced by the operation of laws that regularly influenced the aggregation of the crystalline particles; since, after pushing division as far as our senses can follow its effects, we find the form of the solids obtained to be mathematically the same. M. Haüy, therefore, conceived himself authorised to consider this result as final, or ultimate, in relation to our faculties; and bestowed on the nucleus the denomination of the *integral molecule*.

When the form of the crystal is the same as that of the molecule, each crystal may be considered as an accumulation of molecules, arranged by some species of polarity. But though the external form of the crystal sometimes corresponds with that of the nucleus, it more frequently differs from it, and sometimes so remarkably, that it appears impossible to devise any laws by the operation of which it could be obtained. Though the nature of such laws may remain for ever unknown, yet it is important to trace their effects, and to devise some mode of explaining their operation and results, that may not be at variance with the first principles of the science it is intended to elucidate. Though the hypothesis of *truncations* readily explains almost any appearance, accommodates itself with wonderful flexibility to difficulties, and introduces considerable facility into the expression of even the more complicated crystalline forms, it is obviously inadmissible in any system that aims at an approximation to truth; because it involves an idea of diminution and subtraction, directly contrary to the most established principle of crystallization. It renders it necessary to suppose, that the secondary forms of crystals are generated, by cutting large portions from the surface of a primitive solid. But crystallization never recedes. It produces the secondary forms, not by abstracting any portion of the nucleus, but by accumulating additional molecules on particular parts of it; and on this most important distinction is founded the explication which M. Haüy has devised.

If their arrangement continue undisturbed, additional molecules can only increase the magnitude of the solid. Each one will be deposited in order by the side of another, till their united numbers form a coat extending over one side of the crystal. But if the next coat of molecules, instead of covering the whole plane, leave round the edges the breadth of one molecule uncovered, there will then be placed on the primitive crystal a thin plane, somewhat less in dimensions than the one on which it is superimposed. Let the same law, which ordered this decrease, continue to operate,

rate, and another plane still less will be applied to the one already generated. Others will succeed, each gradually and symmetrically diminishing, till they terminate in a single molecule, forming the vertex of a pyramid, elevated, by the influence of this law of decrease, upon one of the planes of the original solid ; and if the same law has operated on the other planes, each of them will be crowned with a similar pyramid.

Such would be the operation of a decrease, by one row of molecules on the edges of the planes. It may take place on the angles, instead of the edges. It is not confined to a decrease of one row of molecules only ; for the decrease may take place, by two or three rows in breadth, and one in height ; or by two or three in height, and one in breadth. More than one of these laws may operate at the same time, in modifying the same nucleus ; and, after the operation of one has reached a certain extent, it may be suspended, and the secondary form of the crystal be completed by the action of another. In short, any, or all of these laws, may operate at the same time, or in succession, on the sides and angles of the same nucleus.

Let it not be objected to this theory, that the splendid polish with which the surfaces of crystals are frequently adorned, could never result from the steps with which the decrease of the molecules must furrow their sides. We must not force any analogy between the grossness of our masonry and the architecture of nature. The molecules, of which crystals are composed, are, to our senses, infinitely small ; and the step, formed by the decrease of one, two, or three rows of molecules, must be to us imperceptible.

Let it not be objected either that the admission of the laws of decrease is unphilosophical ; because, from their variety, from their partial operation, and the facility with which any, or all of them, are resorted to, they appear capable of deriving any possible form from any conceivable nucleus. To this M. Haüy has provided a reply. By an ingenious application of his mathematical science, he has not only calculated the laws, by which the known secondary forms of all crystals may be generated, but he has demonstrated, that it is impossible, by *any* law of decrease, to derive certain secondary forms from particular integral molecules ; and this demonstration is the more important, as, in several instances, it precludes the possibility of confounding substances essentially different, which the ambiguity of their other external characters might have caused to be erroneously associated.

Where the industry and dexterity of Mr Haüy have failed, in mechanically extracting the integral molecule, he has discovered its form, by an inverse operation of the calculations that would have

have determined the secondary forms, had he been put in possession of the primitive one. The geometrical propositions, by which the accuracy of his deductions is demonstrated, are given at length by M. Häüy: the particular propositions relating to each species, accompany the descriptions of the mineral to which they belong: he has rendered the description of crystalline forms simple and precise, by applying to it ingenious representative signs; and he has devised a nomenclature, in which almost every known crystal is distinguished by a specific denomination.

It is not from so short and imperfect a sketch, that the merits of a system, so various in its relations, and so complicated in its detail, can be properly appreciated. It appears to us to have enriched mineralogy with the only unerring external character, and to present an infallible criterion for determining the mineralogical species. We need no longer reluctantly rely on the discordant results of analysis, nor allow ourselves to be bewildered by the intermixtures of colour, by indeterminate fracture, or varying specific gravity. We are possessed of a character impressed with mathematical accuracy, which no illusive appearances can conceal; which our wilfulness cannot vary, nor our ignorance mistake.

Analysis, locality, and other external or internal characters, enable us to associate to the perfect crystal, the abortions of disturbed crystallization, and the amorphous masses in which minerals are most frequently found. Even here, the laws of crystallization frequently apply; and the integral molecule may be extracted by mechanical division, from an apparently unarranged mass. To the few substances that are as destitute of regularity in their internal structure, as in their external form, the usual modes of investigation must still be applied.

It is in the determination of the *species*, that the interests of philosophy are most concerned. The manner in which they are afterwards grouped into *genera*, or classes, is comparatively unimportant; and as its utility wholly consists in directing us where to seek for the species we are in quest of, it may be safely resigned to the caprice of each fabricator of a system, provided its arrangement does not violate any established law, or militate against any acknowledged fact. The impropriety of classing minerals strictly, according to the proportions of earths they contain, as determined by analytic experiments, seems to be sufficiently proved by the uncertainty attached to such investigations.

The progress of science has seen minerals repeatedly transferred from one genus to another, to the no small embarrassment of those whose knowledge of a mineral is confined to the relative position its name occupies in the columns of the system which they honour by their approbation. A system which would require

quire talc to be divided into two species; because it is sometimes found to be utterly divested of the magnesian earth, which, upon other occasions, is esteemed its most essential component, may have been established in the infancy of science, and continued through despair of devising one less objectionable; but its existence ought to cease with the ignorance which sanctioned it.

Perfectly aware of the difficulties under which the old division laboured, M. Haüy has distributed minerals by a method, the simplicity of which leaves it little liable to objection. His first class consists of the combinations of earths and alkalies with acids. The second class consists of the combination of earths with earths; sometimes united with an alkali. The third class consists of combustible substances not metallic. The fourth class, of metals, arranged according to their oxidibility and reductibility.

In the description of each species, after stating the name by which he wishes it to be distinguished, and its synonymes, M. Haüy proceeds to consider its essential character, derived from the most prominent, unvarying, and definite of its internal and external characters.

In considering the geometric character, the primitive form is given, together with the value of its angles. The greater or less facility of obtaining the nucleus by mechanical division is stated, and the direction of the natural joints is indicated.

He proceeds to examine the physical characters, comprehending specific gravity, relative hardness, fracture, magnetic and electric relations, refraction, phosphorescence, tenacity, &c.

Its chemical character comprehends the action of the blow-pipe, and of acids; and gives the results of the analysis in which the greatest reliance can be placed.

These compose the specific character of each substance, and are distinguished by their invariability, from the diversity of forms it may exhibit, the colours with which it may be decorated, and the variable degree of its transparence.

In investigating the forms which any mineral assumes, those which are *determinable* are first examined. This term includes all crystals capable of geometrical description. Each is distinguished by the name which has been designated in the nomenclature of crystals to represent that particular variety; the value of its angles are indicated; and, if the structure is complicated, the necessary elucidations are given.

The indeterminable forms are next noticed. They comprehend the results of disturbed or rapid crystallization, and all those minerals that are stalactitic, globular, granular, or wholly amorphous. The varieties of colour, and degrees of transparence, are next at-

tended to. The distinctive characters which essentially facilitate the examination of minerals, by pointing out wherein they differ from the substances to which they bear a general resemblance, are detailed with remarkable perspicuity and precision. Each article is terminated by annotations on the geological relations of the substance, and observations on its utility in medicine, or in the arts.

This rigorous examination of minerals, and inquiry into relations hitherto imperfectly developed, has led M. Hauy to make very important changes in the distribution of the species. Not a few, which appeared with distinction in former systems, are now reduced to varieties; and not a few species, which appeared too comprehensive, have been subdivided. Many mineralogists will start at finding chalcedony, jasper, hornstone, and opal, united to the species of quartz; and will be almost equally amazed to find zeolyte subdivided into mezotype, stillbite, analcime, and chabasie. It would far exceed our limits, to enter into a disquisition on individual alterations; yet it is proper to express our general opinion of their propriety. After recovering from the shock occasioned by the overthrow of our previous associations and prejudices, we have commonly acceded to them; and almost always, on extending the investigation, we have enjoyed the satisfaction of yielding an unqualified assent.

The innovating hand of M. Hauy has not been confined to these changes; for his reader will find, that the entire nomenclature of mineralogy has been altered, and that scarcely one of his old acquaintances bears the denomination by which it was formerly distinguished. Of all the alterations he could possibly devise, this is the one which must prove the most intolerable to veteran mineralogists. It is most offensive to the self-love of many, to the prejudices of others, and to the indolence of all. The discoverers, who have bestowed some favourite denomination on the substance they have introduced to public notice, and perhaps have given it their own name, or prevailed on their friends to give it, will be not a little irritated to find this child of adoption torn from them, and announced to the public under another appellation, which, to their ears, must sound most barbarous. Those whose attachment to system and establishment renders all innovations suspected and disagreeable, will feel their indignation not a little excited; and all will find it an unpleasant exertion, to obtain a knowledge of these new names, and to acquire the habit of associating them readily with the objects they represent. Aware, as M. Hauy must have been, of the general disquiet the change of nomenclature could not fail to produce, he ought to have potent arguments to justify his adoption of so unpopular an alteration. Let us examine his inducements.

All system-mongers seem to be affected by a troublesome propensity to neology, and have erroneously imagined that there is as much merit in fabricating a word as in discovering a fact. They seem to think that the grandeur and novelty of their language may give an aspect of originality and sublimity to their hypothesis ; and that the obscurity in which their phraseology may involve it, will render it more difficult to assail. Frequent failures have not convinced them of the fallacy of these ideas ; and almost every theory, from the phlogistic one of Stahl to the transcendental one of Kant, has been distinguished by an almost entire change in the names of the subjects to which it related. These changes, however, are sometimes necessary ; and the old mineralogical nomenclature will be found to contain numerous instances of names that essentially needed reform.

The new chemical nomenclature has been sanctioned by the approbation of all Europe ; and it would be absurd to object to its extension to mineralogy, in every instance where it could be consistently applied. It is certainly much better to talk of sulphate of barytes, than of ponderous spar ; of phosphate of lime, than of apatite ; and of sulphate of strontites, than of schützite, by which the Germans have chosen, with their usual disregard of euphony, to distinguish that mineral. Sulphuret of lead is more intelligible than galena ; phosphate of lead, than either green or brown lead ; and molybdate of lead, than yellow lead ore. These names can only be disagreeable to those who are ignorant of every thing about a mineral except its mere external appearance, and the appellations by which they have been accustomed to distinguish it ; for its chemical name must be suggested by a knowledge of its composition.

As far as the adoption of the chemical nomenclature extends, we most heartily agree, therefore, with M. Hauy's reform ; but there is a very numerous class of minerals composed of earths combined with earths, with or without a metallic oxide, and with or without an alkali. No modifications of language can describe the composition of these substances, without extending the name to an immeasurable length, and without the greatest confusion, from the similarity of composition in very different minerals. To such substances, therefore, a specific denomination must be applied ; and M. Hauy found so many defects in the old nomenclature, that he has almost entirely changed it.

Where two minerals were associated, in his system, that had formerly been considered as distinct, it sometimes was requisite, to prevent mistakes, to substitute one new name in place of the two old ones ; and it was absolutely necessary, when a former

species was subdivided, to distinguish each of the newly constituted species by a particular appellation.

These instances, however, are not very numerous; but the mode in which the old nomenclature was generally constructed, was thought liable to various objections. Many minerals derived their name from the places in which they were found, and these were considered as vicious, because, being frequently found in situations very remote, several appellations might, with equal propriety, be given to the same substance. Others were named from their colour, others from radiation, or any other peculiarity in their structure; and these again were thought defective, because the distinction on which the name was founded, was generally not confined to the substance which derived its appellation from it. Other names arose from some fanciful analogy, as the hornblendes, hornstones, &c.; and these required change, because the analogy was vague or unphilosophical. Some names were rejected because they were inharmonious, and another tribe on account of the monotony of their terminations. Others were more reasonably objected to, because the same names had been used in different countries to denote substances entirely dissimilar. In short, the grounds of exception were so many, and so captious, that it is much to be wondered at that any one of the old names should have passed the ordeal.

To remedy these defects, it was proposed to devise a nomenclature which should describe the specific characteristic of the substance. Where the mineral could not boast any very prominent feature, it was thought most eligible to give it some denomination quite unmeaning, as the name of the discoverer, or one derived from ancient mythology. Probably M. Hauy was not acquainted with Gulliver's travels, or he would have employed a machine similar to that which was used with so much success for composing books at Laputa; a contrivance which must have been unrivalled in the fabrication of unmeaning names. To these insignificant denominations, however, we can only object, that they are troublesome and unnecessary. But M. Hauy has devised another mode of deriving names, that appears to us to merit a more serious reprobation; for he has made them the vehicle of his geological theories, and has baptized several minerals according to their supposed relationship to fire or to water. This attempt is equally idle and presumptuous. We shall, in another place, examine the geological opinions of M. Hauy; and, till then, shall be contented with this exposure of his futile endeavours to incorporate them with the more substantial and scientific details of his treatise.

M. Haüy observes, that some exception from the rigour of his principles should be made in favour of such names as have been sanctioned by very general use. To this we have no objection. We only regret that he has so much limited the operation of this principle, and that the few instances of its exertion have been in favour of some of the greatest nomenclatural delinquents that have appeared before his tribunal. After his indiscriminate censure of all geographical names, how came Strontianite from Strontian, and Yttria from Ytterby, to be allowed to pass? and, after the just reprobation of the word *spur*, we are surprised to see feldspar permitted to occupy a place in the system. We cannot fairly object to arragonite, as it only enjoys a reprieve; or to actinte, which exists in the same precarious manner, with small hopes of transmission to a second edition. We may more reasonably complain, that other names were not equally favoured. The word *augite* appears vastly preferable to the fantastic, theoretic term, *pyroxene*, which is interpreted, ‘*bête ou étranger dans le domaine de feu*.’ *Leucite* was perfectly well known to every mineralogist, of course liable to no ambiguity; and now we see its place supplied by the word *amphigene*, ‘*qui a une double origin*,’ referring, like pyroxene, to the author’s geological opinions. *Sapare*, a name unmeaning, indeed, but pretty generally received, has, we know not why, been supplanted by *diphene* ‘*qui a deux forces*,’ obscurely alluding to its electric qualities. M. Haüy unfortunately found the French language too inflexible to second his exertions, and he was obliged to find names for his fossils, in the inexhaustible mine of Greek literature. His readers have little cause to regret their being expressed in a language which, to many of them, is probably inaccessible; for it is difficult to conceive any thing more ridiculous, than some of the significations, which are gravely detailed as characterizing the substances they are applied to. We find *meionite* ‘*moindre ou inférieure*;’ *pleonaste* ‘*qui surabonde*;’ *amphibile*, ‘*équivoque ou ambigu*;’ *diallage*, ‘*difference*;’ *aptome*, ‘*simplicité*;’ and, to sum up all, *chabafie*, ‘*tirée d’un mot grec qui désignait une certaine espèce de pierre*.’ It is but justice to M. Haüy, to observe, that for this last name he is indebted to the citizen Bosc d’Antic, who deserves to be immortalized for having devised the most superlative specimen of nomenclatural absurdity. It appears obvious from these examples, that, even supposing the objections to the ancient nomenclature were well founded, and the views by which M. Haüy proposed to guide himself in its reformation were correct, he has entirely failed in attaining the objects he proposed, and disfigured the language of science by numerous barbarous innovations.

Some of these remarks may appear to be unnecessarily severe;

But it must be remembered, that the defects of a work, of such sterling merit, are of extensive and formidable operation. Errors which might have passed without observation in an ephemeral production, call for serious reprobation when they appear incorporated with a system which promises to effect a change in the science of which it treats. We should be glad, indeed, that this disagreeable part of our task might terminate with these animadversions; but, however we may admire the sagacity and precision with which M. Häüy has discussed individual species, we cannot yield the same unqualified approbation to his geological speculations. A slight examination of them will convince our readers, that M. Häüy is merely a mineralogist of the cabinet; that he is unacquainted with the magnificent arrangement of mountains; and that, from inexperience, he is incapable of comprehending the vast details of their construction, of developing their relations, and tracing the transitions which form the links of their union.

The geologist who is accustomed to the examination of mountains, who is informed of the variety of structure which is exhibited, and the complexity of gradations that may be traced in examining the grand features of the constituent masses of the earth, will not be a little astonished to find all *rocks* huddled into an appendix. Overpowered by the immensity and novelty of these contemplations, and bewildered by diversities of aspect, M. Häüy has lost sight of the order which pervades the arrangement of mountains; he has perplexed himself with ideal irregularities, and has introduced into his descriptions of rocks, a confusion which only exists in his own ideas. Aware of his own inexperience in this department of the science, M. Häüy solicited the aid of the illustrious Dolomieu, and informs us, that he has been guided by the lights of this sagacious observer. In this part of the work, however, we have found errors and inconsistencies, that cannot possibly be imputed to that eminent geologist, so distinguished for accuracy of observation, and luminous arrangement of facts.

In the examination of their structure, rocks may be divided into simple and aggregate. Simple rocks have generally been considered as species in mineralogical systems, and the components of aggregates have been individually examined. A wish to render all the species he permitted to hold a place in his system, as precise as possible, has induced M. Häüy to reject every thing that appeared ill-defined; and, imagining simple rocks to be susceptible of great variety in their composition, he has almost entirely excluded them. It appears to us, that, in some instances, he has allowed this principle to conduct him too far; and that, in others, he has shrunk from the consequences which must have resulted from its rigorous extension. Had this rule been strictly adhered

hered to, limestone must have been excluded from the system, as its contaminations are numerous and variable; yet we find all its combinations admitted, and their composition detailed with considerable accuracy. Jasper ought to have been equally rejected; since it is only a contamination of quartz, and constitutes rocks, as irregular in composition, and as much perplexed with transitions, as any rock M. Haüy has placed in his appendix. It is difficult to conceive, on what principles these have been admitted, when serpentine was excluded; especially as M. Haüy expressly says, it has the same relation to talc, that limestone has to calcareous spar. We find petrosilex in the appendix of substances imperfectly known, and there it is perhaps properly enough placed; for we believe there is no one substance whose composition is more various. The Germans have confounded a variety of quartz with petrosilex, under the name of hornstone. This association is most improper. The first is found in mineral veins, and forming bands, veins, and nodules, in secondary limestone: it is totally infusible. The other forms veins and strata in primitive rock, is frequently the basis of porphyry, and is always more or less fusible. We are obliged to M. Haüy for carefully avoiding to confound these substances, though we are far from agreeing with him in the supposed identity of petrosilex and compact feldspar.

We searched through the collection of rocks, in vain, for the siliceous schistus, or *lapis lydius* of the Germans, which seem to have been totally overlooked. To make amends, however, we are presented with a rock under the denomination of *râche cornéenne*, a name which is perfectly inadmissible on the principles of nomenclature laid down by M. Haüy, as it is founded on a vague analogy. We are informed that trap is a variety of this cornéenne; and afterwards we find basalt considered as a lava. The old French mineralogists pretended to have discovered some unintelligible difference between trap and basalt; but though this is roundly assumed in M. Haüy's treatise, we are provided with no means of distinguishing the basaltic lava from the *cornéenne dure*, or trap, unless it be the prismatic form; on which, it is well known, no dependence can be placed. After the assumption of basalt as lava, we need not be surprised to find obsidian pearlstone, and various other substances, forcibly associated in the same class. This, however, will not be conceded without a contest, which M. Haüy seems wholly unprovided with arguments to maintain. Substances of so dubious a nature ought to have been examined with peculiar care, to detect, if possible, some latent character which might lead to the determination of their origin. We find them, to our mortification, hurried over with extreme negligence, without even a notice of their most obvious characters. It would

seem, that the magic word *lava* is considered as containing the essence of all description. Though swelled by several minerals of at least dubious origin, the catalogue of volcanic substances is very imperfect. It is followed by a notice of the minerals which it is affirmed are formed in lava subsequent to its cooling. This catalogue is also imperfect in extent; and the very principle on which it is founded is objectionable, as several of these substances are discovered in the more recent lavas immediately after their eruption.

It appears unnecessary to extend these observations any farther. We conceive, the instances we have adduced will warrant us in asserting, that this portion of M. Häüy's valuable work falls far below the general tenor of its excellence. The divisions of rocks are arbitrary and indistinct; the descriptions are imperfect; and the theoretic assumptions very frequently unwarranted. The candour of M. Häüy, however, we are persuaded, will prevent him from being mortified by our observations; for in this part of his subject he does not pretend to excel. His dexterity in mechanical division can here no longer avail him; and he is even precluded from deriving benefit from his mathematical science. He has generously risked his well-earned reputation, to render his treatise more complete; and we feel grateful for his efforts, even while we criticize what appears to us their erroneous direction.

At the same time that we have endeavoured to expose his apparent errors and inconsistencies, we gladly express our admiration of his various merits, of the genius which has inspired his performance, and the indefatigable exertions which have realized his scientific views. His style is invariably elegant and perspicuous, his arrangement luminous, and his illustrations ample. The candour and philosophic moderation which is maintained through the whole work, reflect an additional lustre on the talents and industry of the author. We cannot close the article, without bestowing just praise on the subordinate embellishments. The work is extremely well printed, and the volume of plates is executed in a very superior manner.

Art. IV. The Works of Richard Owen Cambridge, Esq. including several Pieces never before published: With an Account of his Life and Character. By his Son, George Owen Cambridge, M. A. Prebendary of Ely. London: T. Cadell & W. Davies, and T. Payne. 4to. 1803.

THIS is one of the many luxuries and superfluities of modern literature; a book which we are glad to have, but could have

have done very well without ; containing nothing very new, or striking, or important ; but innocent upon the whole, and respectable, and affording a very laudable recreation for those whose curiosity is rather the desire of amusement, than of knowledge.

Mr Cambridge seems to have been one of those persons, of whom poverty would have made a very popular author ; but, being unfortunately born to a considerable fortune, and having gained admission to a very large and distinguished circle of society, he found that he could pass his time more agreeably than in preparing volumes for the press ; and lived a long time in perfect health and tranquillity, without exercising his genius in any thing of greater magnitude than a few periodical papers, and some occasional little poems and dissertations. He was one of those characters, in short, that seem destined rather to delight their contemporaries, than to attract the admiration of posterity. With the happiest temper, and the most amiable manners, Mr Cambridge appears to have united the refined wit and accomplishments of a gentleman, to the learning and information of a scholar, and to have been contented with the pleasure and the reputation that he derived from the colloquial display of his various talents and information. His biographer, indeed, has informed us, that ‘ he was remarkably exempt from those passions which usually incline men to exchange domestic enjoyments for the toil of public business ; that his love of fame was limited to a desire of being respected and beloved by those in whose society he wished to live ; and that his natural disposition and talents were peculiarly adapted to the cultivation of polite literature, and the charms of familiar conversation.’

Such men, though extremely respectable and praiseworthy, and though their multiplication may, indeed, be considered as the best indication of a refined and enlightened state of society, generally receive their whole portion of fame in their life, and but seldom obtain any reversion of posthumous celebrity. Few are so fortunate as to have their scattered pieces collected into a handsome quarto, and to have their lives and characters transmitted to posterity by a biographer who joins perfect candour and information to the amiable partiality of affection. The incidents of Mr Cambridge’s life are, as might have been expected, neither numerous nor extraordinary ; and they are not commemorated as such by his biographer. The only thing that provoked a smile in the whole narrative, was to find it carefully recorded, that ‘ when every necessary arrangement was made for Mr Cambridge setting out on his travels, he was stopped by the *bard frost* of the year 1739, and his plan was never resumed.’ As to the rest of his history, it is very short and barren of incident. He was educated at Eton, where he acted plays in

in Latin and English ; and at Oxford, which he left without a degree. He entered the Society of Lincolns Inn, but was never called to the Bar. After his marriage, he resided in Gloucestershire, where he wrote the *Scribleriad*, built boats upon the Severn, and adorned his estate with plantations. He afterwards removed to Twickenham, where he continued to reside, till death put a period to a life that extended through no less than eighty-six years of innocence and enjoyment. He rode a great deal on horseback, drank water, and was remarkable for uninterrupted and equal cheerfulness, great urbanity of manners, and the utmost tenderness and indulgence to his family. He lived in great intimacy with all the literary characters of the age, and seems to have been universally beloved and respected as a delightful companion, and a man entitled to distinction both for his talents and his virtues.

The pieces contained in this volume, are chiefly republications of those compositions which appeared in Mr Cambridge's own life. His principal performances were, the *Scribleriad*, which was published in 1751, and 'the history of the war on the coast of Coromandel,' which appeared in 1761. The former of these works is reprinted in this compilation, of which it occupies about one half : the other is omitted. The rest of the volume is made up of little poetical pieces, chiefly playful and satirical, and of about twenty papers published in the 'World,' and fully as remarkable for politeness and vivacity, as any that appeared in that popular publication.

It would be absurd in us to enter into any criticism upon works which have been published for more than half a century. The *Scribleriad* was read, at one time, by all the polite scholars in the country, but never found its way to popularity, and is now almost entirely forgotten. It is a continuation of the adventures of *Scriblerus*, in the form of a mock heroic poem, and is written throughout with great learning, elegance, and judgement. The subject, however, is by no means interesting ; and the composition has a certain uniform mediocrity of merit, that is usually found to sink faster in the stream of time, than substances of a more unequal texture. 'The history of the Coromandel war' is simply and clearly written, though the subsequent publication of Mr Dowe's work has, in a great degree, superseded the use of it. There is a pleasing anecdote with respect to this publication, in a note to the account of Mr Cambridge's life.

'M. Lally Tolandel, the son of M. Lally who commanded the French force in India in the war of 1756, happening to meet my father at a friend's house, eagerly inquired if he was the author of a work

work relative to India ; and being answered in the affirmative, sprung forward and embraced him with great emotion, apologizing for this liberty, by assuring him, that he was under more obligation to him than to any man living ; for that his work had been of greater service than all the other documents he could procure, towards redeeming his father's honour, and recovering his property ; owing to the clear and intelligent detail it contained of the transactions on the coast of Coromandel, in which M. Lally bore so principal a share, and to the just representation it gave of the conduct of the French in that quarter.' p. liii.

Of the smaller pieces, there are some imitations of Horace executed with a good deal of point and vivacity, and some elegies and epistles in a very pleasing style of composition. The rest are mere *vers de societe*. We add the two following parodies, which have the merit, we think, of being very ludicrous.

' Occasioned by the Author hearing of a Clergyman, who, in a violent fit of Anger, threw his Wig into the Fire, and turned his Son out of Doors.

" Now by this sacred periwig I swear,
Which never more shall locks or ringlets bear,
Which never more shall form the smart toupee,
Forced from its parent head,—(as thou from me) ;
Once 'twas live hair ; now form'd by th' artist's hand,
It aids the labours of the sacred band ;
Adds to the Vicar's brow a decent grace,
And pours a glory round his rev'rend face.
By this I swear, when thou shalt ask again
My doors to enter, thou shalt ask in vain."

' He spoke ; and furious with indignant ire,
Hurl'd the vast hairy texture on the fire ;
Then sternly silent fate—the active flame
Remorseless wastes the soft and tender frame :
Writhed to and fro consumes the tortured hair,
And, lost in smoke, attenuates to air,' p. 332. 333.

* On meeting at Mr Garrick's an Author very shabbily dress'd in an old Velvet Waistcoat, on which he had sewed Embroidery of a later date.

' Three waistcoats in three distant ages born,
The bard with faded lustre did adorn.
The first in velvet's figured pride surpast ;
The next in 'broidery ; in both the lait.
His purse and fancy could no further go ;
To make a third he joined the former two.' p. 350.

Upon the whole, this is a book which the rich will do well to buy, and the poor may be very well contented to want. It

is very handsomely printed, and is embellished with about a dozen portraits of the author's celebrated friends, and two views of his places of residence.

AET. V. *Publi Virgili Maronis Opera : ad lectiones probatiores diligenter emendata, et interpunctione nova sepius illustrata.* Cura Joannis Hunter, LL. D. in Academia Andreapolitana Litt. Hum. Prof. Andreapoli. 12mo. 1800.

A CRITICAL edition of a classical author from a Scotch press, is so very rare an occurrence, that we should be inclined to take some notice of this book, even if its intrinsic merits did not entitle it to our attention. The task of an editor, however, we are sorry to say, does not appear to afford any great encouragement to the perseverance of those who have already proved their qualifications for the discharge of it. It is now several years since Dr Hunter presented the public with a very correct and valuable edition of Horace, in which a variety of emendations on the text and punctuation were supported and illustrated by the addition of *notulae quædam et variantes lectio[n]es*. Virgil, however, now comes out without any notes or various readings whatsoever. The text is reprinted almost exactly from the second edition of Professor Heyné ; and the only critical observations which the volume contains, are presented all together in a short preface, which every reader, we believe, has wished longer.

It is not only the great merit of most of these remarks that makes us anxious for something of a more detailed annotation from the same hand, but an intimation which Dr Hunter himself gives in the outset, that he has adhered to the reading of Heyné in several places, where he could not help having considerable doubts of its propriety, through his unwillingness to set up conjectural emendations against manuscript authority. This is undoubtedly a very laudable diffidence, in so far as the *text* is concerned ; but from what we have seen of Dr Hunter's observations, we are persuaded that those conjectures which are now altogether suppressed, would have afforded matter for many very excellent and instructive notes ; and we cannot help regretting, that he should have been prevented, by any circumstances, from submitting them to the consideration of the public.

The preface, which may be considered as a specimen of Dr Hunter's talents for annotation, contains a considerable number of very interesting discussions. We shall mention a few instances.

In the twelfth *Aeneid*, *Aeneas* is described, after his wound, in the following lines, which stood thus in all the editions previous to that of Heinsius.

- ‘ Stabat acerba fremens, ingentem nixus in hastam,
Aeneas, magno juvenum et marentis Iuli
Concursu lacrimisque immobilia.’

Now this, which is the reading of almost all the manuscripts, is undoubtedly the right reading according to Dr Hunter. The meaning is, that he remained unmoved *juvenum concursu et lacrimis Iuli*. Heinsius, however, who does not appear to have understood this form of construction, took it upon him to expunge the *que* after *lacrimis*, and to perplex the whole passage by a wrong punctuation. Both Burman and Heyné have followed this erroneous correction; and the passage stands thus in all the recent editions.

- ‘ Stabat acerba fremens, ingentem nixus in hastam,
Aeneas, magno juvenum et marentis Iuli
Concursu, lacrimis immobilis.’

In order to confirm his own and the ancient reading of this passage, Dr Hunter here takes occasion to observe, that it is not at all uncommon for the best writers to enumerate together, a number of things that have each some separate and peculiar relative, or appropriate adjunct, and then to subjoin all the relatives and adjuncts in a separate list, leaving the reader to pick out and afford all the connected words, from their obvious sense and connexion. In Virgil, he observes, there are many examples of this, as—

- ‘ Munera portantes, aurique eborisque talenta
Et sellam.’

That is, *talenta auri, et sellam eboris*. In the same way—

- ‘ Idemque Jovem, Phrygiamque ex ordine matrem
Invocat, et duplices et que creboque parentes.’

The same peculiarity of construction occurs in this passage of Livy—‘ Irreligiosum ratus, sacerdotes publicos sacraque populi Romani pedibus ire ferriques;’ that is, *pedibus sacerdotes ire, et sacra ferri*. In Homer, also, this arrangement is very common.

Ἐνθαδ' ἄρεισμα τοῖς καὶ εὐχαλπή πτελεῖς αἰδογεῖ,
 Ολλυκταῖς τοῖς καὶ ολλυρεσταῖς.

The meaning is evidently, *εὐχαλπή ολλυκταῖς, καὶ οιράδηις ολλυρεσταῖς*. In English poetry, the same construction is quite familiar. In the notorious translation of Sappho—

- ‘ Blest as the immortal gods is he,
 The youth who fondly fits by thee,
 And hears and sees thee, all the while,
 Softly speak and sweetly smile.’

Rope also says—

‘ Annual, for me, the grape and rose renew
The juice neclareous, and the balmy dew.’

In these instances, no ambiguity or confusion appears to arise from the disjoined position of the corresponding words; and we perfectly agree with Dr Hunter in thinking, that the passage which Heinsius and Heyné thought it necessary to alter, is infinitely more intelligible and graceful, according to the old reading, and upon this view of the construction. At the same time, we may observe, that this dislocation of the associated words becomes faulty and ungraceful, whenever the number of separate objects, thus enumerated together, is so great as to produce any degree of confusion. We do not remember that any of the ancient classics have ever employed it where more than two things were taken together. Shakespeare, however, in the following verse, has used something of a larger license.

‘ The courtiers, scholars, soldiers, eye, tongue, sword.’

And Milton, upon another occasion, has gone still farther—

————— ‘ So eagerly the fiend
O'er bog, or steep, thro' strait, rough, dense, or rare,
With head, hands, wings, or feet, pursues his way,
And swims, or sinks, or wades, or creeps, or flies.’

In such passages, the crowd and hurry of the primary objects is so great, that when we meet the relative secondary one, it is almost impossible to determine to which it should be referred. When so many couples, in short, are mingled together in disorder, it is quite impossible, at one glance of the eye, to assign to each word its proper partner.

In the Fourth Æneid, Dr Hunter has made a very ingenious observation on a passage that has perplexed all the commentators from Bentley to Heyne. It is that where, after comparing Mercury to a bird skimming along the water, the poet says,

‘ Haud aliter terras inter coelumque volabat ;
Littus arenosum Libyæ ventosque secabat
Materno veniens ab avo Cyllenia proles.’

Bentley, holding the phrase ‘ secare littus’ to be absurd, is for substituting *legebat* in the first line. Dr Hunter, however, retains the common reading, upon the authority of all the MSS.; and, merely taking away the point at the end of the first line, reads, ‘ ~~secabat~~ littus arenosum Libyæ.’ In justification of this construction, he observes, that it is by no means unusual for an intransitive verb to assume, in some degree, the power and activity of a transitive; in which case, it admits the same syntax, and acquires the same

same power of government. Thus, Virgil himself has used and construed the verb *trepidare*.

‘ *Multa manu medica, Phœbique potentibus herbis,
Nequidquam trepidat.* ’

Ardere, in like manner, takes an active form in ‘ *formosus pastor Corydon ardebat Alexin :* ’ and Horace has ‘ *exsudare causas.* ’ Although we do not recollect any instance in which *velare* is construed in this manner by any of the poetical classics of antiquity, it is remarkable that Servius has employed it in this way in his commentary upon the word *velivolus*, which, he says, signifies either *id quod velis volatur seu transitur*, or *quod velis fertur*. Virgil himself, we may finally remark, has used the phrase, ‘ *cava trabe currimus æquor.* ’ Now, if it be allowable to say, ‘ *currere æquor,* ’ we certainly do not see why it should be thought inconsistent to say ‘ *volare littus.* ’

In the Fifth Book, the common editions read,

‘ *Tum senior Nautes, unum Tritonia Pallas
Quem docuit, multaque insignem reddidit arte,
Hæc responsa dabat, vel quæ portenderet ira
Magna deum, vel quæ fatorum posceret ordo ;
Isque his Ænean solatus vocibus insit.* ’

Dr Hunter reads *bic* in the third line, understanding those verses as a kind of parenthetical description of the prophet; and, we think, rightly. There is no form of construction more common, than this resuming of the nominative case after the sentence appears to be proceeding to something else. Nay, there are many instances in which an object is first introduced, in some of the oblique cases, in the course of construction; and then the nominative is resumed, without regard to that construction, for the purpose of stating or expounding some circumstance attending it. Thus, in the Tenth Book of the *Æneid*, we have

‘ ————— rapiens immania pondera baltei,
Impressumque nefas ————— ’

all in the accusative; but the farther description of the *nefas* is given, without any interval, in the nominative:

‘ ————— una sub nocte jugali
Cæsa manus juvenum foede, thalamique cruenti. ’

Aristotle, in the following passage of his *Rhetoric*, has used the same construction: *Ἄνθρωποι αγαθα ποιεῖ ταῦτα*, in the accusative; and, immediately after, *ἀνθρώποις, δημοσίοις, αὐτοῖς, &c.* We shall be the more readily excused by our classical readers for enlarging upon this minute particularity of syntax, when we state, that a learned

learned Professor of Germany has actually taken upon him to alter a whole passage in Xenophon's *Apologia Socratis*, from ignorance of its existence. The words in all the MSS. and printed copies stand as follows; and, from what has been already said, it is evident they stand in need of no emendation:

—οὐδὲ οἰς γε μηνὶ εργασίαι κατέπιεν πάντας καὶ ζημιὰ, ισχοντικαὶ, τοιχωρυχικαὶ, αὐδητοδοσικαὶ, πολεὺς προδοσικαὶ, οὐδὲ αὐτοὶ οἱ αυτιδικοὶ τύποι πρᾶξαι τοῖς κατ' οὓς φάνται. Ap. Soc. § 25.

Now, Professor Zeunius, of Wittemberg, in his edition of this part of Xenophon's works, has deliberately turned all these nominatives into datives, that they might agree with *εργασίαι* in the beginning; and applauds himself very much for the correction; observing, 'vulgari lectione nihil ineptius fingi potest.' Such is still the diffidence of these reformers!

Upon the subject of punctuation, Dr Hunter refers, in his Preface, to the following passage of the First Georgic, which stands thus in Professor Heyné's, and the greater part of the earlier editions:

' Semina vidi quidem multos medicare ferentes,
Et nitro prius et nigra perfundere amurca;
Grandior ut fetus siliquis fallacibus esset:
Et, quamvis igni exiguo properata maderent,
Vidi lecta, diu et multo spectata labore,
Degenerare tamen, ni vis humana quotannis
Maxima quæque manu legeret.'

The fourth line of this passage, which, by this punctuation, is connected with the latter clause of the sentence, has given infinite trouble to the commentators. A verbal critic may indeed be excused for being ignorant of the mysteries of agriculture; but it is scarcely possible to repress a smile, when Professor Heyné gravely informs us that beans, which have been boiled till they are soft, will grow faster than any other. Dr Hunter removes all this perplexity, by taking away the point from the end of the third line, and putting a full stop at the end of the fourth. When this puzzling verse is connected, in this way, with the three preceding ones, the meaning turns out to be, simply, that beans are thought to require less boiling if the seeds from which they were produced had been sprinkled with nitre before sowing. This interpretation, which the new pointing suggests most obviously, is confirmed, in a very singular way, by a passage in Palladius, which seems to have escaped the notice of Professor Heyné and all the other commentators. This writer, without any allusion to Virgil, says expressly, 'Graeci afferunt fabae semina nitrata aquâ respersa, cocturam non habere difficultem.'

We

We look upon this as a very happy and satisfactory explication of a passage, which Brunckius thought it necessary to interpolate, before he could make any sense of it whatsoever.

The punctuation of this edition, indeed, so far as we have examined it, appears to be peculiarly judicious and correct. There is only one passage in which we suspect it to be inaccurate. We allude to these lines, towards the end of the Third Book of the Aeneid :

‘ Praecipites metus acer agit quocumque rudentis
Excutere, et ventis intendere vela secundis.
Contra iussa monent Heleni, Scyllam atque Charybdim
Inter utramque viam, leti discrimine parvo,
Ni teneant cursus : certum est dare lintea retro.’

The whole of this passage, we think, is full of difficulty ; and it is one of those upon which we expected some elucidation from Dr Hunter : but, without pretending to reconcile all the parts of it, we are very clearly of opinion, that there ought to have been a comma after *contra* in the third line, as *jussa* seems evidently to be the nominative of the subsequent verb *monent*, and not in construction with *contra* as a preposition.

In the close of his Preface, Dr Hunter has introduced, perhaps not quite regularly, nor by any very obvious connexion, a short dissertation on the ancient form of the genitive case, which he conceives to have terminated, originally, in all the declensions in *is*. As a specimen of his acuteness and latinity, we shall subjoin this passage in the original.

‘ Genitivus in -i, nominum in -es desinentium, in Virgilio frequens est ; in cuius rei rationem indagandam viri docti, Heynius et Heinlius, frustra operam suam insumerunt, parum aut nihil proficientes. Itaque genitivi formam antiquissimam, unde omnes deinceps aliae quae in usu sunt, levibus admodum mutationibus, gradatim provocaverunt, rem Grammaticis, tam veteribus, quam recentioribus, adhuc intactam, paucis indicare opere pretium erit. Haec igitur genitivi forma antiquissima, quam declinatio tertia adhuc plerumque servat, definebat in -is ; ut *aura*, *aura-is* ; *animos*, *animo-is* ; *labor*, (olim *laboris*) *labor-is* ; *frustus*, *frustu-is* ; *dies*, *die-is*. Postea vel duæ vocales in unam syllabam coibant, vel a elidebatur, vel denique utrumque simul. Ita, ex *aura-is* factum est vel *aur-as*, ut *paterfumili-as*, vel *aura-i*, et postremo *aur-æ*, quod enunciatum videtur *aur-ai* ; ex *animo-is*, eliso s, *anim-o-i*, quod est *anim-i*, ut, in plurali etiam numero, ex *anu-o-i* et *anu-o-i*s facta sunt *anim-i* et *anim-is*. In declinatione tertia s plerumque retinetur ; interdum, ut in *Achill-i*, *Oront-i*, &c. eliditur. In quarta *cornu* facit vel *corn-us*, contractum pro *cornu-is* ; vel, absque s, *corn-u*, contractum pro *cornu-i*. Eodem modo ex *die-is* factum vel *di-es*, (vid. A. GELL. ix. 14.) vel *die-i* ; et, postremo, vel *di-e*, prout vocalis vel prior, vel poste-

stor, ab altera absorpta fuerit. Uniuscujusque autem formæ exempla, *præter -ais, -ois, et -fis*, quarum, quod sciām, *exempla non extant, ex Ruddimanno, aut Vossio, petenda relinquimus; hic enim de hac re fufius agere non patitur instituti nostri ratio.'

The theory contained in this passage appears to us to be at least very probable. All languages are naturally quite regular and uniform in their structure. The idea of relation, denoted by the genitive case, would therefore be expressed, it is most probable, in every word, by the same adjunct or variation; and, where varieties exist that cannot be referred to the intermixture of another language, it is most reasonable to ascribe them to some such process of abbreviation as Dr Hunter has indicated in the foregoing passage. There is one form of the genitive, however, which he has omitted to specify, or account for: we mean the termination of *Achillei* and *Ulixei*, which occur five or six times in the writings of Horace. It seems easy, however, to reduce this also under the system of Dr Hunter. The original genitive was *Achille-is*, which, with the *s* dropped from the end, gave *Achillei*, afterwards contracted into one syllable, *Achillei*. This is sometimes Latin by the editors of Horace (as in Epist. lib. I. 6. v. 65. and I. 7. v. 40.) *Achilli*: the *i* long being the general representative of those diphthongs of which it originally formed a part; *duo* forming *dico*, in this way, and *anipos*, *animis*. The ancient Latins, indeed, appear to have had a great partiality for this vowel, as they have made it the common substitute for *o* also, in words derived from the Greek. *Απολλων*, in this way, becomes *Apollonis*; *ληγομεν* is changed into *legimus*; and, according to Dr Hunter, all the Greek genitives in *ος* into the corresponding Latin termination of *is*.

Upon the whole, we can safely recommend this as one of the most correct editions of Virgil that has yet been offered to the public. We do not know, indeed, that it contains a single typographical error; and in the reading and punctuation of the text, it is sufficient to say, that Professor Heyne has publicly declared it to be superior to any that he had previously examined. We cannot conclude, however, without again expressing our regret that Dr Hunter did not find it convenient to add to its value, by a more copious collection of those critical remarks, of which his Preface contains so favourable a specimen.

ART. VI. *Modern Geography, a Description of the Empires, Kingdoms, States, and Colonies, with the Oceans, Seas, and Isles, in all parts of the World: including the most recent Discoveries, and political Alterations.* Digested on a new plan, by John Pinkerton. The astronomical introduction by the Rev. S. Vince, A. M. F. R. S. and Plumian professor of astronomy and experimental philosophy, in the University of Cambridge. With maps, drawn under the direction, and with the latest improvements, of Arrow Smith, and engraved by Lowrie. To the whole is added, a catalogue of the best maps, and books of travels and voyages, in all languages. London: Cadell & Davies, and Longman & Rees. 2 vol. 4to. about 1600 pages; and abridged, 8vo. 700 pages.

THERE is no science so attractive as geography. It requires scarcely any preparation of previous study, and deals in a sort of information so popular and various, as to recommend itself even to those who have but little relish for literary occupations. It is indeed a kind of condensation of books of travels, and exhibits the most captivating collection of marvellous truths that ever yet were assembled, to excite or to gratify curiosity. Of its substantial utility, it is unnecessary to speak. In this country, it is considered as a necessary part of the most common education; the elements of it are taught in our parish schools; and, accordingly, there are scarcely any, except those in the lowest ranks of society, who are not acquainted with the relative position, distance, and comparative size and advantages of most of the nations of Europe:—with the names and situation of some of their principal cities, mountains, rivers, &c.; with their natural productions, and the principal articles of their manufactures and commerce:—and to whom those parts of the other quarters of the globe, where their own nation has settlements or trade, are totally unknown. On the Continent, however, the case is remarkably different. There, particularly in France, it is not uncommon to meet with persons who have had a liberal education, and who discover considerable information on other subjects, profoundly and laughably ignorant of countries adjoining to their own, closely connected with it in the annals of history, or allied in commerce or friendship. It is not surprising, therefore, that the continental writers should have produced but few systematic works on geography. If we except d'Anville, there is scarcely one name, in this department of science, of which they are entitled to boast. The French works of La Croix, &c. are too brief, and by no means adequate to convey that portion of geographical knowledge which will rescue that nation from the charge of comparative ignorance. The German works of Busch-

ing, Fabri, Ebeling, &c. are dull and tasteless, and executed too much in the manner of the country in which they appeared, to render the study of geography easy, useful, or interesting. In this country, we have long been possessed of geographical grammars: most of them indeed differ little more than in name: they have all adopted the same plan; pursued the same arrangement; and even copied mutually their mistakes and errors. While many essential and highly useful parts of geography are omitted, or carelessly and imperfectly treated, their pages are filled with a detail of events and circumstances totally unconnected with that science: they seem to have forgotten what the term *Geography* means and comprehends. We shall in vain look in them for an account and description of the different productions of the earth; of the varied or peculiar appearances of its surface; or even for accurate and scientific information respecting the boundaries and extent of the different countries. On the contrary, we should be inclined, from the perusal of these works, to conclude, that they contained a meagre and ill-digested *history of the world*, interspersed with a few incidental patches of geographical information. So little skill has been exercised in forming the plan, and arranging the materials of these grammars, that every addition that successively suggests itself is inserted in the most clumsy and careless manner; and, not unfrequently, the information given in one part, is directly opposite to that which we receive from another.

We have stated the defects of these systems the more fully, because we cannot characterise the modern geography of Mr Pinkerton more precisely, and at the same time more justly, than by stating it to be free from these defects. The former writings of this gentleman, and the whole course of his reading and studies, had qualified him for the necessary, but inglorious drudgery of laborious compilation. The maps, charts, and books, which he must not only have consulted, but studied and compared, before such a fund of materials could have been collected, must have been very numerous. No expence appears to have been grudged; no pains or labour, however constant or tedious, to have been spared, in order to render the work a complete system of modern geography, according to the plan, which, after mature deliberation, the editor thought proper to adopt. According to this plan,

— objects most essentially allied with each other, instead of being dispersed as fragments, are here gathered into distinct heads or chapters, arranged in uniform progress, except where particular circumstances commanded a deviation: and instead of pretended histories and ~~and~~ commercial documents, the chief attention is devoted to objects strictly

strictly geographical, but which, in preceding systems, have often appeared in the form of a mere list of names, 'the evanescent shades of knowledge.'

In the preliminary observations, Mr Pinkerton enumerates the order of the topics discussed :

' 1. The historical or progressive geography of each country. 2. Its political state ; including most of the topics which recent German writers, by a term of dubious purity, call Statistic. 3. The civil geography, including objects not so immediately connected with the government, as an account of the chief cities, towns, &c. 4. The natural geography.'

To the four grand divisions of the world he has added a fifth, which he names Australasia and Polynesia, including New Holland, and the lately discovered islands in the Pacific Ocean. He has arranged the states of Europe in three divisions, according to their real consequence, as of the first, second, or third order ; and each is treated at a length proportioned to its weight in the political scale, and the consequent interest which it inspires. According to this arrangement, Turkey is ranked in the first order : ' It cannot so justly be reduced to the second order ; for though perhaps approaching its fall, still it boasts the name and weight of an Empire.' But certainly it ought to have taken its station according to its comparative rank and influence, and its present and real consequence ; and not according to its former, and now merely nominal dignity.

The general description of Europe is clear, accurate, and full. There are, however, two assertions, of which no evidence is offered ; and which we are inclined to think are erroneous. In enumerating the tribes from which Europe derived its first population, Mr Pinkerton considers the Sarmatians as distinct from the Goths and Scythians ; and as the same with the Slavi, the ancestors of the Russians, Poles, &c. In the review of ' A Vindication of the Celts,' we mentioned it as our opinion, that according to the testimony of the most ancient and best informed Greek authors, the Sarmatians were descended from the Scythians ; and a more close examination of those authors has completely established our belief in that opinion. It is, we know, generally believed, that the Sarmatae and the Slavi are the same : the latter, however, cannot be the same with the people anciently called Sarmatae, as their persons, manners, religion, and language, are totally distinct : and we are not acquainted with any evidence, which proves even that the Sarmatae of the later classical authors, and the Slavi, are identical. The other opinion of Mr Pinkerton is very singular, and appears to have been formed altogether by

the plastic power of hypothesis. He asserts, that the same term was employed by barbarous nations, to denote mountains and forests; because the former were frequently covered with trees. And from this ambiguity, it seems, the Greeks and Romans were frequently led to mention and describe mountains as existing, where, in reality, there was only a large forest. Assuming these positions, for which he offers no authority, he boldly asserts the Riphæan mountains of the ancients, to have been nothing else than a large forest running from east to west. *

In order that the reader may be enabled to form a clear and just idea of the materials of these volumes, we shall proceed to enumerate the different subjects which are discussed under each of the four grand divisions.—1. Historical or progressive geography. The different names by which each country has formerly been known, and is now designated, with conjectures respecting their etymological meaning, are given: the extent, boundaries, and supposed or enumerated population, are mentioned.—The next article respects the original population. This very obscure topic is too frequently treated with dogmatism and unwarrantable confidence, and with an evident leaning to the author's own peculiar hypothesis. It is, however, generally curious and interesting; and presents many facts not commonly known, and many conjectures and observations unquestionably plausible and ingenious. But we must caution the reader to watch carefully and constantly the steps of Mr Pinkerton, when he treads on antiquarian ground.—Progressive Geography, Historical Epochs and Antiquities, complete the first grand division. As the first of these titles is not to be found in former geographical treatises, and is highly useful and interesting; and as the mode in which Mr Pinkerton treats the historical part, differs very essentially from that which has been generally adopted, we shall lay before our readers the progressive geography of Holland, and the historical epochs of Switzerland, as specimens of this part of the work. It is generally known, that the Rhine is now comparatively small and insignificant; and that the changes in its course, and the frequent inundations

* In the Appendix to his 'Dissertation on the Goths and Scythians,' he advances the same opinion, and supports it by an expression of Pliny, who applies the term *jugum* to the Hircynian forest. But *jugum* is a metaphorical term, and is applicable to any continued chain; and may, therefore, without any impropriety, be applied to such a forest as the Hircynian was in the time of Pliny. It is highly improbable, that this well-informed author was ignorant of the existence of this forest. We are therefore justified, in applying the term, as used by Pliny, to a forest; although the use of it in this sense is, we believe, singular.

undations of the sea, have frequently altered the boundaries, and the appearance of Holland; but the date, the circumstances, and the exact consequences of these events, are, in general, very imperfectly known.

‘ The progressive geography of Holland, (says Mr Pinkerton), becomes curious and interesting, from the singular phenomenon of the increase of the sea. Upon inspecting the accurate maps of the ancient and middle geography of Gaul, by D’Anville, it will be perceived that the Rhine divided itself into two grand branches, at Burginassium or Schenck, about five miles N. W. of the Colonia Fragana, now an inconsiderable hamlet, called Keln, near Cleves. The southern branch joined the Meuse, at the town of Mosa or Meuvi; while the northern passed by Durstadt, Utrecht, and Leyden, into the ocean. From the northern branch was led the canal of Drusus, which originally joined the Rhine to the IJssel, a river that flowed into a considerable inland lake, called Flevo, now a southern portion of the Zuyder Zee. This canal of Drusus being neglected, and left to the operations of nature, the Rhine joined the IJssel with such force, that their conjunct waters increased the lake of Flevo to a great extent; and instead of a river of that name, which ran for *near* fifty Roman miles from that lake to the sea, there was opened the wide gulph which now forms the entrance. The northern and chief mouth of the Rhine was, at the same time, weakened and almost lost, by the division of its waters; and even the canal of Drusus was afterwards almost obliterated, by the deposition of mud in a low country, in the same manner as some of the ancient mouths of the Nile have disappeared in the Delta of Egypt.

‘ The southern branch of the Rhine, which flowed into the estuary of the Meuse, as above mentioned, was anciently called Vahalis, a name retained in the modern Waal; the ancient isle of the Batavi being included between the two branches of the Rhine, and thus extending about 100 Roman miles in length, by about twenty-two at the greatest breadth. The estuaries of the Meuse and the Scheld have also been open to great inroads from the ocean; and the latter, in particular, which anciently formed a mere delta, with four or five small branches, now presents the island of Zealand, and the most southern of those of Holland, divided by wide creeks of the sea. This remarkable irruption is supposed to have happened at the time that the Goodwin sands arose by the diffusion and consequent shallowness of the water. These great changes may be supposed to have made a slow and gradual progress; and some of them seem so ancient as the time of Charlemagne: Some of them are so recent as the 15th century; for in 1421, the estuary of the Meuse, or Maese, suddenly formed a vast lake to the S. E. of Dort, overwhelming seventy-two large villages, with 100,000 inhabitants, who perished in the deluge.

‘ By a subsequent change, the Rhine was again subdivided; and a chief branch fell into the Leck, which joins the estuary of the Meuse between Dort and Rotterdam, and must now be regarded as the north-east mouth of that noble river; while the Vahalis, or Waal, continues to

be the southern ; both branches being lost in a comparatively small stream, the Meuse. The less important variations in the geography, may be traced in the Francic historians, and other writers of the middle ages.' Vol. I. p. 468.

' The chief historical epochs of Switzerland, may be arranged in the following order :

' 1. The wars with the Romans ; the subjugation of the Helvetii and Rhæti, and the subsequent events, till the decline of the Roman Empire in the West.

' 2. The irruption of the Alemanni, in the beginning of the 4th century, who are, by some, supposed to have extirpated the ancient Helvetians.

' 3. The subjugation of the western part of Switzerland, as far as the river Reuss, by the Franks, who annexed that portion to Burgundy. The Grisons on the east were subject to Theodoric and other kings of Italy.

' 4. The conversion of the country to Christianity, by the Irish monks Columbanus, Gallus and others, in the beginning of the seventh century.

' 5. The invasion of Alemannia by the Huns,* in the year 909 ; and the subsequent contests with these barbarians till the middle of that century.

' 6. About the year 1030, the provinces which now constitute Switzerland, began to be regarded as a part of the empire of Germany ; and, in the course of two centuries, they gradually became subject to the House of Hapsburg.

' 7. The commencement of the Swiss emancipation, A. D. 1307 ; and the subsequent struggles with the House of Austria.

' 8. The gradual increase of the confederacy ; the Burgundian and Suabian wars ; and the contests with the French in Italy.

' 9. The history of the Reformation in Switzerland.

' 10. The insurrection of the peasants of Berne, in the middle of the seventeenth century.

' 11. The dissolution of the confederacy by the French invasion A. D. 1798.'

Under the second and third divisions, Political and Civil Geography, we meet with nothing but what is to be found in other systems ; but the information which they contain is arranged with more judgment ; it is more full and accurate, and less mixed with extraneous matter. The last division, which is termed Natural Geography, embraces many important and interesting objects, most of which are entirely omitted, or very imperfectly detailed in former works. What Mr P. denominates the physiognomy of the country ; the hills, vales, and rivers ; their size, direction, and length ; the nature of the soil and state of agriculture ; the component

* The Ugurs, so called by the writers of the time. They were a branch of the Voguls, a Finnish race.

component parts of the mountains, their general appearance, and height above the level of the sea,—Botany, Zoology, and Mineralogy, form the most original articles in this division. The botanical part, as far as it regards the countries of Europe, appears to us to be rendered dry, and comparatively useless, by being loaded with technical terms. To slip in a whole system of Botany, itself a distinct and very comprehensive science, under a subdivision of a treatise on Geography, appears to us to be quite ridiculous. This branch of the subject would have been handled in a manner more suitable to the place it holds, if it had consisted rather of a detail of the appearance and use of some of the most remarkable plants; especially as this is the mode which is adopted in delivering the botany of the other divisions of the world; and is entirely followed in the Abridgment. A system of geography is not intended for the professed botanist; nor will it be consulted for scientific information in any branch: technical terms ought therefore to be carefully avoided. There is a total want of reference to authorities, for the facts mentioned under the heads, Botany, Zoology, and Mineralogy; which certainly ought to be remedied in future editions; and which appears singular from the number of books referred to in every other part of the work. Mr P. informs us, in his Preface, that for the botany of the several countries, this work is indebted to Mr A. Aikin, a zealous and intelligent cultivator of natural history. He adds, ‘ It may be necessary to remind the unlearned reader, that the Latin names in this place are unavoidable, because plants not known in England must rarely admit of English appellations.’

Having given a general outline of Mr P.’s plan and arrangements, we shall now proceed to particularize individual portions of the work, in which he has deviated, in most instances, with considerable advantage, from the track pursued by former geographers. He justly observes, that ‘ it has been urged as a reproach to modern geography, that by the obstinate retention of antiquated divisions, and the confused minuteness of separate descriptions, it has not made an uniform progress with modern history and politics, which it ought to illustrate.’ (Vol. I. p. 333.) Hence many are perplexed, when, in the perusal of modern history, or in the observation of events daily occurring, they find those states acting a principal part, which are scarcely noticed, or merely grouped with others, in systems of geography; and other states, on the contrary, which those systems place in the first rank, acting a very subordinate and passive part. As an instance, Mr P. particularly notices the House of Austria, which we should be led to consider as, of itself, trifling, and almost insignificant in the affairs of Europe, if we were to form our opinion of its relative power and consequence from geographical works: whereas its hereditary dominions alone, entitle it to rank among the chief European

principal component parts, ‘the arch-duchy of Austria; the kingdoms of Hungary and Bohemia; the grand-duchy of Transylvania, which, with the Buckovina, may be regarded as part of Hungary; the dominion towards the Adriatic, with the acquisitions of Venice and Dalmatia; and, lastly, that part of Poland which has fallen under the Austrian sceptre.’

In the third rank of European powers, are included the German and Italian states. Mr Pinkerton differs very considerably from former geographers, in his manner of classing and describing each of these. He first gives a general description of Germany; and afterwards, in two distinct chapters, enumerates and describes the several states to the north and south of the Mayne. This mode of exhibiting the minute and complicated geography of the German states, is certainly attended with many advantages. It presents to the mind a picture, in which the principal objects are more distinctly seen, and more closely grouped; and in which more attention is paid to *keeping*: but we are inclined to think, that the common division of Germany into its circles, with a general enumeration of the states contained in each, ought also to have been given. Although Mr P.’s method is best adapted to give a clear and distinct view, yet the constant reference to the different circles, which we meet with in history, ought to have induced him to have admitted the old division. After a general description of Italy, he considers it as divided into three parts, the southern, central, and northern; each of which he treats fully and accurately. In the Appendix to the first volume, is given, the value of coins used in common calculations. This table is very properly confined to those coins which are frequently mentioned in books of history and travels; and it is thus rendered less prolix and obscure than the tables appended to other geographical systems.

The second volume commences with Asia. We refer the reader to the progressive geography of this division of the world, as exhibiting a favourable specimen of our author’s industry in research, and extent of information, (Vol. II. p. 2—8.) In his arrangement of the Asiatic Isles, as they are improperly termed, he follows the learned President De Brosse, who, nearly half a century ago, proposed, that the countries to the south of Asia, namely, New Holland, New Zealand, New Guinea, &c. should be styled *Australasia*; and the numerous isles in the Pacific, *Polynesia*. In order to arrange the different islands under these two divisions, with clearness and accuracy, Mr P. endeavours to fix some limits between the Indian and Pacific Oceans.

As the continent of America divides the Atlantic, or Great West-

ern Ocean, from the Pacific, or Great Eastern Ocean, (both so termed in relation to the old and civilized world) ; and as Africa divides the Atlantic from the Indian Ocean, so, by parallel usage and deduction, what is called New Holland may be considered as the fixed division between the Indian and Pacific ; thus claiming with justice the authority of a continent, washed by the Indian Ocean on the west, and the Pacific on the east ; while a line drawn from the most prominent central capes, in the north and south, may be regarded as a boundary of these two oceans. The southern extenſion of this imaginary line is of little moment ; but in the north, it must be considered as a division of great importance to precise discussion, as the isles on the west must be considered as strictly Asiatic, and intimately connected with the description of Asia ; while those on the right belong to Australasia and Polynesia. This division must naturally and unavoidably depend on the observation of the widest channel between the Molucca islands, and Papira or New Guinea ; and the degree of longitude, 130° from London, seems nearly to amount to a boundary. Hence Amboyna belongs to the Asiatic isles, while Timor-laut belongs to Australasia. The meridian of boundary passes through Ceram ; but the proximity of that isle to Amboyna, may properly connect it with the Asiatic isles ; with which Myfil may also be classed. From the N. W. extremity of Papira, or rather some small islands lying at that extremity, a clear line may be drawn, following the same meridian, and leaving Gelolo among the Asiatic isles on the W., and those of Pelew, among the Polynesian, in the Pacific. This line, then, bending N. W., would include the Philippine islands and the Bashees, passing to the S. of Formosa ;—the other limits and appellations being sufficiently clear.

Such may therefore be the assumed boundary between the Indian Ocean and the Chinese Sea on the W., and the Pacific on the E. ; and between the Asiatic isles, and Australasia and Polynesia. The boundary between the two latter great divisions may be traced, by regarding what is called New Holland as a continent, or great leading island, with which those most adjacent must be regarded as connected. Hence Papira belongs to Australasia ; and a line drawn in the latitude of three or four degrees to the N. of the Equator, and then passing S. in the meridian of 170° E. from Greenwich, so as to include the New Hebrides : thence in the parallel of 30° S., gradually stretching to 175° W. from Greenwich, including New Zealand, and the isle called Chatam, will present the natural and precise boundary of Australasia.

That division called Polynesia, by far the most extensive, adjoins the W. to the line above drawn around the Asiatic isles ; thence it ascends about lat. 18° long. 128° E., in a N. E. direction, so as to include the isle called Rica de Plata, long. 161° ; and thence curving S. E. and encompassing the northern Sandwich islands, where our great navigator fell,* and the Marquesas ; and extending to 120° W. from London.

* There are other Sandwich isles, lat. 59° S., or beneath the parallel of Cape Horn. Such is the perplexity of the received nomenclature.

London. Any isles to the N. E. or E. of this line of demarkation, may be regarded as belonging to North or South America.

* The southern boundary of the Asiatic isles may be considered as sufficiently ascertained, by the wide channel between them and New Holland; while the N. W. extremity of Sumatra may present a meridian of separation on the W., between the Asiatic isles, eminently so styled, and those in the Indian Ocean. The same western boundary may be assigned to Australasia.

* The southern limits of the last, and of Polynesia, alone remain; but as few or no islands have been discovered to the S. of New Zealand, the parallel of 50° S. lat. may be lastly assumed as the boundary of both.

* Polynesia will thus extend from 50° S. lat. to about 35° N. lat., that is 85° , or 5100 g. miles; while the breadth taken from long. 170° E. from Greenwich, to 130° W. upon the Equator itself, will yield 60° , or 3600 g. miles.

* The length of Australasia may be computed from 95° of the same longitude, to 185° ; that is, 90° ; in lat. 30° , or nearly 5000 g. miles; while the breadth, lat. 30° N. to lat. 50° S. will be 3180 g. miles.

* Even the smallest division, that of the Asiatic isles, which has been called the Oriental Archipelago, is of great extent, from 13° S. lat. to 22° N. lat.; that is, 35° , or 2100 g. miles; while the length from 95° E. long. to 132° , yields 37° not far from the Equator, nearly corresponding with the breadth.'

In perusing Mr Pinkerton's work, we have observed several omissions and errors: more in number, and, in general, of greater consequence, than we should have expected from an author so long habituated to minute and laborious investigation. The principal of these we shall lay before our readers, and also our reasons for differing from Mr Pinkerton in some of his speculations and conjectures. Sunderland, Paisley, and Kilmarnock, towns which have rapidly increased in population, trade and consequence, within these few years, are either passed over in absolute silence, or barely mentioned, and classed with places of comparatively trifling size and importance. We are afraid, that the unfounded and unaccountable prejudice of Mr Pinkerton against the Gentle Shepherd, induced him to omit the name of Allan Ramsay in the list of Scotch poets. In vol. I. p. 146, where he treats of the antiquities of Scotland, we were surprised and disappointed not to find the vitrified forts described, or even noticed. They are such well known and singular remains of antiquity, and have given rise to so many various conjectures respecting the object, mode, and time of their construction, that the omission betrays great carelessness and inattention. Mr Pinkerton suffers his fondness for hypothesis to pervert his judgement, in p. 252, where, speaking of the stone monuments at Carnac in Brittany, he infers that

that they were erected by the Belgic Gauls, and not the Celts, because the Veneti, who inhabited that country in the time of Cæsar, were Belgæ ; but, according to Mr Pinkerton himself, *they* were not the original inhabitants, but the Celts. His description of those curious monuments is imperfect and incorrect. He appears to be ignorant that many have, not improbably, supposed them to be part of an entrenchment of Cæsar †. He is entirely silent respecting that work, of stupendous labour and incalculable utility, the Levé on the banks of the Loire. As this structure, so far as we recollect, is not even mentioned in the generality of the descriptions of France, we shall present our readers with the following account of it, taken from a recent tour through France.

‘ We now entered upon the Levé, in my opinion the most stupendous work which France, or almost any other country can exhibit. Compared with it, the utmost exertions of the kind which I have elsewhere seen, are insignificant and pigmy productions : if it is anywhere outstripped, it must be in Holland and in China. The parts of Anjou, Tourraine, and the Orleannois, which border on the Loire, are perfectly flat ; and, in the earlier ages of the world, must have formed a vast morass, of not less than 100 miles in length, and from 20 to 40 miles wide. So says tradition, and it appears highly probable.

‘ The Levé is an immense bulwark, raised by human hands, to exclude the river from this wide, extended tract of country, and confine its waters within its banks, and extends from Angers to Orleans, perhaps farther. Its base may be about 40 feet wide ; its elevation is nearly 25 from the adjoining level ; and its upper surface, which is paved with large stones, like the streets of London, just capacious enough to admit of three carriages abreast. My inquiries concerning the date of its origin, and by whom executed, were unavailing.’ *

Mr Pinkerton agrees with Mr Townsend, in the causes which he assigns for the defect and decrease of the population of Spain. This is computed at 11,000,000, or 74 to a square mile ; while France yields 174, and England 169 ; and the kingdom of Naples is computed at 201. The expulsion of the Jews, after the conquest of Granada ; that of the Moors by Philip III. ; the contagious fevers frequent in the southern provinces ; the incessant intestine wars carried on for seven centuries against the Moors ; the emigrations to America ; the vast number of unmarried clergy and monks, and the want of detached farms, are the principal causes assigned by Mr Townsend. We are very much inclined

† *Nouvelles recherches sur la langue, &c. des Bretons*, par Mr L. T. D. C. (Mr De la Tour D'Auvergne Corret).

* Hughes' *Tour through several of the midland and western departments of France in 1802*, p. 124.

clined to doubt the operation of several of these assigned causes, at least to any extent, or for any length of time ; and are of opinion, that others not mentioned by Mr Townsend, particularly that bane of agriculture, the Mesta, and the taxes called Alcavalla and Millones, have been more general and predominant and lasting in their influence.

We are surprised that Mr Pinkerton, whose researches on the subject of language, where it is connected with the antiquities of a country, or illustrative of the origin and relationship of nations are well known, should have passed over in silence that spoken in the Banhat of Timeswar, which, from the account and specimens given of it by Ferber in his letters to Baron Born, is more similar to the Latin than any other modern tongue is, and confirms the tradition, that the present inhabitants of that part of Transylvania are descendants of the ancient Romans, most probably of such as fled from Italy at the invasion of the Goths. Mr Pinkerton is silent also respecting a small tribe who inhabit part of Dalmatia near the sea, and who, from the account of Fortis and a recent traveller *, ought to be placed, in the scale of human comforts and of intellect, far below the savages of Terra del Fuego, or Van Diemen's land. Nothing but the extremity of hunger can compel them to use any exertion to procure food ; and in this employment, they discover no skill or ingenuity ; so that, if any thing obstruct them in their accustomed stupid method, their resources are at an end : they cease to labour, and resign themselves to torpid inactivity and famine.

It is well known, that the north-west corner of Spain is inhabited by a race of people totally distinct in manners, disposition, and language, from the other inhabitants of that peninsula. Their language, in particular, presents not the most distant resemblance in its original and genuine words, or in its grammatical structure, to any of the languages of Europe. It is probably more pure than any other modern tongue. Their manners and disposition also seem not to have been changed or modified by their vicinity to France and the other parts of Spain. In whatever respect the Biscayans are considered, they may justly be deemed a singular race, well worthy the attention of the philosopher and philologist. Don Hervas, who has lately published a catalogue of all the known languages, is inclined to the opinion, that the people of Georgia in Asia are descended from a Basque colony, from the close and general resemblance between the languages spoken in Georgia and Biscay. The accounts which are given by Baretti and Fischer, of the manners and language of Biscay, are very

* *Voyage pittoresque en Dalmatie, &c.*

very meagre and imperfect. From the researches of Mr Pinkerton, stimulated by his attachment to antiquarian and philological studies, we expected some original and accurate information on this subject; but he does not even take notice of this part of Spain. Mr Pinkerton ought to have described, among the natural curiosities of the German states, the subterraneous recesses in the sands of Westphalia, in which human bodies have been preserved for many centuries, by the extreme aridity of the soil and climate, without any alteration, except that their skin is dry and shrivelled. A very short and imperfect notice is given of the island of Sardinia, in a note (vol. I. p. 650). This island, from its size, ought certainly not to have been passed over in this degrading manner; and as Mr Pinkerton must have known that former systems of geography contain very little information respecting it, and that it has never been described or visited by any English traveller, he ought to have considered it as his duty, in a work which is held forth as a complete system, and as intended and calculated to supply the defects of former authors, to have given the result of every thing which has been written respecting this island. In the account of Tibet, no mention is made of the existence of Cretins, similar to those near Sion in Switzerland; though, as these unhappy creatures are found only in these two countries, and present an appearance at once humiliating to human nature, and interesting to the philosopher, the existence of them in Tibet ought certainly to have been mentioned.

Mr Pinkerton seems, with great justice, to doubt of the existence of Baffin's Bay: It is, indeed, very improbable that Baffin should have made, in so high a latitude, so many discoveries as he claimed; and it is singular that they are all unknown to succeeding navigators. If Baffin's Bay do not exist, it is probable that Greenland is a continuation of the new continent: from the specimens of the language of Greenland and the Esquimaux Indians given by Don Hervas, the connexion, or at least the contiguity of these countries may be inferred. In page 587, Mr Pinkerton has extracted from Dobrizhoffer, a German missionary, a very curious account of the Abipons, a warlike nation on the Rio Grande.

Mr Pinkerton's work concludes with a catalogue of maps, charts, and books. A *catalogue raisonné*, if executed with judgment and impartiality, would be a very useful appendage to every work which had required from the author extensive research. It would not only prove highly satisfactory to the reader, by enabling him to collect information for himself, and to confirm every account of which he entertained any doubt, but it would serve

serve the important purpose of saving time, and preventing its misapplication in the perusal of improper or trifling publications. Books are now so multiplied, that he who wishes to engage in the study of any branch of literature or science, is at a loss which to reject, and which to peruse; and would feel himself highly indebted to the man who would give him a catalogue, and a short character of the principal works in each department. Such catalogues might be drawn up without much labour, if each author, who has been employed on a work where it was necessary to consult all that had been previously written, would undertake the one connected with his subject. They are not uncommon in Germany; and there are a few in France. In the former country, Professor Meiners has appended to his History of all Religions a most excellent, and at the same time concise, account of the different books which he consulted. The catalogue of Mr Pinkerton is defective in many respects: The titles are seldom given fully; frequently the size of the book, and the best edition, is not mentioned; and the character is not sufficiently precise and determinate. We shall briefly notice a few of the most important omissions and errors.

‘ Marshall’s Journey,’ &c. It is impossible to determine what book is meant by this short and imperfect title. The work referred to was published in 1776; the author was W. Marshall, Esq.; he travelled through all the north of Europe, and through Poland, the Netherlands, Germany, and parts of France and Spain. The work consists of four volumes; but the fourth volume, which contains his journey through France and Spain, is seldom to be met with. We can confidently recommend these travels, as containing more full, accurate, and scientific information on the important subject of agriculture, than most works of this nature.

‘ Poniz, Viage de Espana, eight volumes 8vo.’ There are twelve volumes of this work: the last four were published some years after the first eight.

‘ Kæmpper’s Japan, excellent.’ Mr Pinkerton ought to have mentioned, that the English translation of this work, which was published by the liberality of Sir Hans Sloane, is very incomplete; and that the original entire work was lately published in French, and we believe in German, which alone ought to be consulted.

The maps, in the quarto-edition, which are of the same size, ought either to have been left out, or given on a much larger scale, separately, so as to have formed an atlas, of a size proportioned to the extent and importance of the work: as they are, they add considerably to the price, and little or nothing to the value of the book. The introduction, by Mr Vince, contains

every

every thing that the student should know previously to the commencement of his geographical studies. The latter part of it, however, which treats of the physiology of plants, and some branches of meteorology, we think superfluous; and it certainly is imperfect, and in many respects incorrect. This part of the introduction, the Linnean names of plants, and the geographical discussions and conjectures interspersed in the larger work, are omitted in the abridgment: in other respects, it seems nearly a transcript of the quarto edition; and, from the comparatively small price and more convenient form, will be more generally useful.

ART. VII. *Second Voyage à la Louisiane, faisant Suite au Premier de l'Auteur.* Par Baudry des Lozières. 2 tomes en 8vo. pp. 824.
Paris. Charles. An xi. 1803. (Mars.)

THE reader who should expect any thing like a book of travels from this title, would fall into a great mistake. These volumes have no pretensions to the name; and the only reason which influenced the author in the choice of it is, that he formerly wrote a '*Voyage à la Louisiane*'. The present publication is, in every sense of the word, a miscellany; and the only uniformity which it possesses, is the perpetual egotism of the author. Were it not for this constantly prevailing feature, we should never be able to conceive, at any one page, that the book before us had not been changed since the last. The childishness of Citizen Baudry is indeed so excessive, and so various, as to become amusing; and the entertainment is from time to time heightened by the reflection, that this singular creature is actually Historiographer of the French colony department. Unconnected as the different parts of the work are, except by the presence of the author, and large as the subject is upon which he might have entered—the whole colonial affairs of the republic—we believe it would be difficult to diffuse matter more thinly over so great a space as he has contrived to sprinkle with something like information and reflexions. His effusions are, for the most part, only valuable as affording some curious specimens of the principles which seem at present to regulate the confidential servants of the French government in their views of West Indian policy, and some striking instances of the total change which the last years of the revolutionary crisis have effected upon the general principles of Frenchmen. Here and there we meet with a fact of some importance, enveloped in a cloud of rant, sentiment, and exclamation.

tuation. Not unfrequently we perceive traces of that natural eloquence with which the very worst of the French writers occasionally surprise us. And although the levity and inconsistency which so strongly mark the characters, as well as the manners of that nation, form the predominant quality of the style, as well as of the matter; yet are we repeatedly consoled with a glimpse of sentiments very different from those which have lately been tolerated at Paris.

The motto—

‘ Si canimus silvas, silvae sint *Consule* dignæ,’

is rather more applicable to the book than its title; for, though we find little about woods, there is a great deal in praise of the First Consul.

In the form of a dedication to those colonists who have been ruined by the revolution of the ‘ negrophiles,’ our author contrives to give a life and character of himself; reminds these unfortunate people (*ces êtres intéressans*, as he generally calls them) how he used to plead their causes for small fees; how he afterwards gave up the bar in order to fight for them; and how, for a small matter, they may see a full account of what feats his regiment performed, by sending to Benichets the printer, No. 142, *rue de la Pomme, Toulouse*. All this we conceive to be the *seasoning* which, he begins by telling them, flattery requires in order to render it palatable. The whole flattery consists in repeating what he has heard many Europeans say—that, had they been ruined like the colonists, they would have died of the spleen.

If such is the style of the dedication, our readers will easily imagine what must be the tone of the preface, a department exclusively devoted, by immemorial usage, to the benefit of the author. It contains one piece of information which might well have been spared, but which is repeated at least half a dozen times, in notes, parentheses, and introductions, that this work was written while the printing went on. ‘ *A mesure qu'on imprime, on écrit*,’ is indeed one of M. Baudry’s favourite boasts. This worthy citizen’s contentment with himself, is not more enviable, and not much more inexplicable, than his entire satisfaction with the measure of liberty enjoyed under the Consular administration. ‘ Under such a government,’ says he, ‘ we are permitted to publish every thing that is useful; and this amiable freedom demonstrates at once the increasing strength of that government, and the rising happiness of the people.’

With an evident allusion to Jaffa and Switzerland, he tells us, (p. 2, vol. i.), that France is now governed only by talents and virtues; and, in p. 335, we learn, that the Augustus of modern times

times has added Britain to his empire: The reconquest of Canada is a favourite scheme with our author: He talks of it as a natural consequence of the restitution of Louisiana to France; says that it may be effected the first favourable moment; and seems to consider the right of property as really inherent in the ancient possessors (p. 252.) Such was the language held by the writers belonging to the Consular government, at the very time when their master complained of the free effusions of the British press, as a breach of the pacific relations between the two countries!

But M. Baudry would not be satisfied with encircling the United States by the acquisition of Canada and Louisiana. He plainly avows his opinion, that France is the natural mistress of all North America. He proposes the conciliation of the Indian tribes as a step equally sure and easy towards the accomplishment of this project; and, mingled as usual with a large proportion of absurdity, we certainly do find, in this part of his remarks, some matter of serious reflection. Every one acquainted with the history of those savage tribes, knows how much more prone they have always been found to embrace the alliance of the French than of the English. The observations of Mr Burke upon this fact, are also well known. He ascribes it to the extreme *soupleness* of the French character. M. Baudry does not fail to enlarge upon the theme, though in language somewhat different from that employed by our great English writer. And he mentions, apparently without any idea of its importance, a very striking circumstance, which demonstrates the systematic attention of the French rulers, at all times, to aid the favourable tendency of the national manners in conciliating the Indians. In the year 1798, he met a party of these people near Philadelphia. Their chief showed him a certificate, finely written, and signed *Buonaparte*; adding—‘ You see that I am a Frenchman, since Buonaparte has sent me a passport.’ Our author afterwards learnt, that the chancellor of the French Consulate at Philadelphia had given the Indian this paper, on account of the enthusiasm which he showed for Bonaparte. This adroitness in gaining over friends, is one of the very few parts of the French policy which we should wish to see imitated by the governments of other nations. It may certainly be kept entirely separate from the ends to which it has been applied by the revolutionary leaders.

We have remarked, that the work now before us has not the smallest similarity to a ‘voyage.’ We may add, that it has little or no connexion with ‘Louisiane.’ The author confesses his love of digression to be irresistible, and apologizes for it, partly by an allusion to Montaigne, and partly by fairly telling us, that every mind, like every body, has its peculiar physiognomy, and that he cannot change the nature of his. Accord-

ingly, above half of the first volume is occupied with the life of a M. Grondel, the oldest soldier in France; and it is only in digressions from this digression, that we find a few unconnected remarks upon Louisiana.

Nothing can be more calamitous than a biographer like M. Baudry, to a plain, respectable man, such as we perceive General Grondel to be, notwithstanding the ridicule in which he is unceasingly involved, by his friend's efforts to immortalize him. Through the whole of this narrative, we are unable to discover any thing peculiar in the deeds of the General, unless that he commanded an out-post in Louisiana, made several narrow escapes from the Indians, had a quarrel with the governor, and, from having lately been out of employment, has avoided being killed. Yet every trifling occurrence of this very simple life, is magnified into heroism; and the biography of such a man is a matter of first-rate importance—because, had his valour been exerted in Europe, he might probably have risen to the highest stations in the republican service. It is frightful to think of the consequences which would follow, from the extension of this principle: we should have nearly as many lives written, as there are spent. Nor is General Grondel the only subject of éloge in this narrative. Our author's manner is, as he says himself, (vol. I. p. 6.), *sauter avez promptitude d'un sujet à un autre*. In conformity with this principle, he gives a laboured éloge of the grenadier Regnisse, who carried M. Grondel away on his shoulders from a skirmish in which he was wounded. 'Glory for ever (says our eloquent author), be to that incomparable Regnisse; that favour of a young man truly interesting; that hero so worthy the title of grenadier! May his name be handed down to the latest posterity, and become the rallying word,' &c. &c. (p. 47. vol. I.) He is, of course, compared to the grenadier who saved the life of the First Consul. M. Grondel's father is also introduced, and praised for his address in deceiving the Indians. Many feats of this kind are recited; as, how he made them believe, he could burn the Mississippi, by slipping some brandy into a glass; how he cheated them with a wig ('a refinement of art, of which they had no idea') and thus saved his scalp; how he practised the old stratagem of the burning-glass, &c. 'Happy ascendant of genius and science (exclaims M. Baudry), it is by your means that mankind are led!' Our author having in the outset warned us not to be surprised at seeing him '*souvent causer avec moi-même*', seems indeed resolved not to let the preparative be lost. The discussions which he holds are very curious; they breathe that pure love of *truism*, which animates so many French reasoners. Thus the life of General Grondel is interspersed with acute arguments, to prove such



such positions as the following: That a shoemaker should not make *pâtes*; and that every man should keep in his place, in order to avoid confusion (p. 93.): that a lawsuit is a terrible thing, (p. 146.): that M. Baudry is no philosopher; and that the poetry in p. 374 is written by himself. Sometimes these truisms are delivered without the demonstrations; but preceded by a *voilà*, the French signal for important discovery. Thus, *voilà* how a well placed firmness produces happy effects (p. 41.): *voilà* how small things may lead to great dangers (p. 39.) General Grondel having been presented at the Tuilleries, we have a long *hosannah* raised to the First Consul, the immortal descendant of heaven, &c. &c. This narrative concludes with a kind of surprise to the reader. We are told, that, after all, General Grondel is not a hero. Why? because the Deity is the only hero in the universe! (p. 181). The General, however, we are informed, is, like old Silenus, full of gaiety; can repeat whole plays; excites the appetite of his friends, by his own hearty stomach; and shews incredible address in amusing the ladies by tricks.

The only good passage which we have met with in this singular piece of biography, is the following accurate description of the French character. It displays a greater degree of impartiality and calm sense, than our readers might be apt to expect from the author of the frippery we have been describing.

‘ Cependant l'on se réfroidit aisément sur le mérite des hommes. En France, surtout, où l'admiration va jusqu'à l'enthousiasme, on oublie bientôt l'utilité d'un homme précieux; on s'y accoutume à tout, on s'y laisse promptement de tout, et l'on y traite les matières les plus sérieuses, avec cette légèreté qui fait le caractère national. C'est l'empire où il y a le plus d'esprit, et le moins de reconnaissances. Le besoin du changement occasionné par un fond naturel d'inconstance, fait qu'on y donne au mérite, l'éclat éphémère d'un goût passager, et qu'il y subit les lois versatiles de la mode journalière.’

M. Baudry also deserves commendation for his constant detestation of that false philosophy which presided over the formation of the French republic. It is something novel to hear such language from a *commis* of that government; and, indeed, the cordial support which he gives to the present order of things in France, is frequently at variance with the more wholesome principles which he appears to hold upon political subjects. There is no great consistency in a writer who praises both Bonaparte and Louis XVI.; weeps over the horrors of the second year, and adores the atrocities of the consular government; cants against the encyclopedists, and bends before the national institute.

Upon the subject of religion, we meet with the same inconsist-

ency. It is extolled, indeed, with the loudest praises ; but evidently from its political tendency. The atheists are abused, after the usual doubts respecting their existence ; and yet, the property of keeping the negroes in a state of idolatry, is strongly inculcated, because it diminishes the waste of animal food on the slave coast. The propagation of the gospel is confounded with ‘philosophisme,’ while the Christian religion is recommended as useful to the colonies. In short, M. Baudry, when he touches upon the general questions either of liberty or of religion, is, like the greater part of his countrymen since the Revolution, obliged to use a language quite new in France, and he perpetually falls into the old irreligious dialect. We actually meet with the following curious exclamation, in a panegyric upon a man’s christianity.

‘ Ainsi, qu’importe aujourd’hui à M. de St Laurent qui est mort, que la terre le ferme sur ses dépouilles, que l’éternité et l’oubli le présent de tout leur poids ? Du silence de la vie il est passé au silence de la mort ; mais son âme vit, et elle plane au milieu des délices sur le vide des choses humaines.’

This mixture of creeds can by no means be imputed to some of our author’s effusions upon the subject of liberty. In these we meet with far more open and unqualified admiration of despotism, than any courtier of the Bourbons ever found it worth his while to display. Such transitions from the principles of late so popular in France, form, we imagine, a peculiar feature in the character of that fickle nation. After mentioning the new calendar, our author exclaims,

‘ What do words signify, provided one is a good Frenchman, and loves the government ? The philosophers may do what they please, the people will never be enlightened. It will remain always a dangerous mass, prone to change its lights into conflagration ; and our proficients of the second year ought to be content with their experience. Too much light blinds and fatigues the class condemned by nature to live in darkness,’ &c. Vol. I. p. 88.

Language like this, a few years ago, would have secured for the historiographer to the colonies, a station in Cayenne. A wise man would find it difficult to pronounce, whether the tenets of that day, or of the present, are farthest removed from truth. The extremes of opinion, between which we have seen the French people vibrate, are perhaps alike erroneous, though not productive of danger equally immediate.

That part of M. Baudry’s work which relates to colonial affairs, bears constant marks of the prejudices natural to a planter ruined by the negro insurrections ; and the incongruity of these prejudices is often as remarkable as their number and obduracy. The negroes

negroes are a race of inferior beings, doomed by nature to a state of slavery. Such is M. Baudry's fundamental principle ; and yet he complains of the regular correspondence which the insurgents of St Domingo maintain with their brethren in Paris ; inveighs against the sumptuous pride with which these men appear in the capital ; and denounces them as dangerous, both by their numbers and their machinations, to the mother country. With all the horrors of the negro character before his eyes in the most exaggerated proportions, he proposes new schemes for increasing the slave traffic. While he acknowledges the impossibility of restoring tranquillity to the revolted island, without an extended system of military operations ; and pretends, that at any time, a few factious whites have it in their power to raise whole colonies of negroes in rebellion ; he is proposing schemes for increasing the black population, and extending the slave system to the new settlements. Truly, we assent to one proposition of our author, (p. 279) : ‘*Je suis homme, et je suis, comme les autres, étampé de la foiblette humaine.*’

Now, supposing that tranquillity is restored to the French islands, our author details, at a most fatiguing length, his views with respect to their improvement. The necessity of ameliorating the structure of society in those settlements, he cannot deny ; and from his verbose declamation in favour of certain general plans, we collect, that he considers the chief *desideratum* to be good magistrates, more especially in the judicial department. But, instead of pointing out any means by which this important want may be supplied, he gives a dissertation against men soliciting for places which they are incapable of filling ; and exhorts all those who look towards preferment, to imitate his example, in refraining from the pursuit of places above their capacity. After good magistrates shall have been procured in consequence of these hints, he proposes that a picture of the Persian monarch slaying the unjust judge, be placed in a conspicuous part of every court of judicature. He is decidedly an enemy to Juries in the colonies, and argues upon this point with some acuteness. But it does not at all appear how the fear of being forced to attend upon Jury trials would operate so strongly in deterring planters from residence, as the manifold benefits of the institution would operate in rendering the colonies an agreeable abode. The example of the English settlements may serve to prove, that no serious inconvenience is likely to result, even to the most industrious planters, from attendance to judicial duties. M. Baudry conceives, that mulattoes and negroes should be prevented from possessing plantations in great culture, and should be forced to reside in the neighbourhood of great towns, or other places of strength.

He thinks, that all free negroes, and free people of colour, should, if not possessed of some property, be reduced to the state of day-labourers or soldiers ; and proposes, that no mulatto nearer the negro than child of a quarteroon, should be allowed to learn reading and writing. All these plans of restriction appear to us utterly inconsistent with the idea of free negroes and mulattoes : nor can we imagine the possibility of ameliorating the state of society in those parts, without keeping the gradual abolition of slavery, and amalgamation of colours in view. If the free people of colour are to be oppressed by such regulations, while they are separated both from the whites and the slaves, the colonial government must expect a renewal of the scenes which first arose from this very quarter.

The plan of prohibiting taverns, at least for the slaves, seems liable to no objection. The evils of intoxication are certainly augmented by those places of resort ; and when we are considering the remedies for abuses in a system of slavery, such an argument as this may be deemed sufficient of itself. It would, however, be difficult to suppress taverns for slaves, without also suppressing those for the free orders ; and this unquestionably leads to many complicated discussions, the very existence of which M. Baudry seems not to have suspected.

The necessity of attending to the state of the highways is enforced with some strength. It is farther proposed, that these should be planted with fruit-trees for the refreshment of the passenger, who would be prevented from abusing this indulgence, by the constant fear of the patroles. Our author's whole policy, indeed, is a strange mixture of liberty and restraint, derived apparently from the unnatural state of society in those slave colonies where he has resided. His ideas of commerce are sometimes singularly unfortunate. He is for the Legislature interfering with what he calls the ‘ morality of trade ; ’ alleging that he has observed avarice prevail very generally, both among the merchants and the shopkeepers of the colonies. In another part, he seriously proposes, that the number of printers should be limited by law, in order to render them less needy, and prevent them from being such bloodsuckers to poor authors. We have here, at least, one instance of the restraints of the mercantile system, supported by those whose interests they attack ; for the raiser of the commodity is actually absurd enough to desire that his market should be contracted, and his sales subjected to a monopoly. In one of his three sets of notes (*postérieures*, *ultérieures*, and *paralipomènes*), our author attacks Bryan Edwards with great vehemence, for his invectives upon Citizens Ailhaud and St Leger. He appears to have succeeded in freeing the former of these men from the hasty allegations



allegations of the English writer: But the sum of the defence urged for the latter seems to be, that he twice saved M^s. Baudry's life in the West Indies.

The second volume is, if possible, less peculiarly connected with Louisiana than the first; but it contains some information of considerable value to West Indian colonists; as, a Congo vocabulary; a list of medicines, with notes of their properties; a Botanical manual, and a variety of directions respecting regimen, the fruit of our author's experience in tropical countries. In a scientific point of view, this volume is also entitled to notice. It presents us with a very curious account of the insect which produces the animal cotton. The process is singular: A worm of considerable size, which our author calls *Porte-mouches*, (well known to planters as the Manioc or Indigo worm), is, at one period of the year, attacked by swarms of the Ichneumon fly. They deposit their eggs in every pore of the unfortunate worm, which now becomes a hotbed for hatching them. The insects, produced all at once, immediately spin each a very minute white cocoon, which envelopes it. The manioc worm is now covered with a white pod, which he, with considerable difficulty, shakes off; and, in a few days, the insects are again hatched from it, but in the form of flies, leaving the animal cotton behind them. Our author describes this production as very abundant in all the colonies, and as possessing great advantages over the vegetable cotton. It would undoubtedly be a most valuable acquisition to those plantations which at present suffer so much from the ravages of the manioc worm. M^s. Baudry's scientific observations, however, are not always so happy. He talks of the parabola described by falling stars, though with some contempt of the vulgar, for giving the phænomenon that name; and he can see only one difference between the phlogistic and the modern system of chemistry, viz. the substitution of the term caloric for phlogiston.

The only other matter worth attending to in this work, is the account which it contains of the *colonial chambers of agriculture*, as new-modelled by the consular government. The object of this institution is the improvement of the whole body of colonial affairs. These Boards, by corresponding with their deputies at Paris, who form a council to the minister of marine, are authorized to denounce every abuse in the administration of the settlements. That some of the alterations on the institution are likely to produce beneficial effects, we do not deny. But it would be absurd to expect any material advantages from this system of *espionage*, when the members of each Board are effectively named by those whose conduct they are appointed to watch.

M. Baudry does not appear quite so constantly in the second, as in the first volume ; but we have been malicious enough to derive some amusement from the frequent recurrence of his lamentations over a Colonial Encyclopaedia, in twenty-five volumes quarto, which he had toiled at during eighteen years, and which he lost in the troubles of St Domingo. His argument, in favour of establishing a Board of ruined Planters (*ces êtres intéressans*), to assist the government of the mother country with advice upon colonial affairs, is also somewhat original : ‘ If I (says he) alone, in the midst of my own ideas, without assistance from any other—without the least communication with a living soul—have been furnished with so many materials by my imagination, and my other intellectual faculties, what might not government expect from a whole commission of advisers ! ’ vol. ii. p. 345.

ART. VIII. *Cours de Morale Religieuse.* Par M. Necker.
3 vol. 8vo. Paris. 1800.

M. NECKER’s former publications are very well known : though the attention they have excited is rather to be referred to their connexion with his short and eventful political career, than to their own intrinsic excellence. The singular title of the volumes now before us, led us to suppose that a considerable analogy might subsist between the author’s former work on the importance of religious opinions, and the present course of religious morality. We have not been mistaken. The similarity in style, and in sentiment, is indeed very great ; although it must be confessed that the former is entitled to take the precedence on a more substantial ground than mere priority of date.

The man, however, who acted so conspicuous a part at the commencement of the French revolution, and who may reasonably flatter himself that his opinions must still have some weight with the people whom he once governed, is certainly entitled to attention ; especially when he speaks upon a subject of uncontested importance, and which he seems to have had very much at heart. M. Necker, we believe, still resides at Copet, near Geneva ; but the discourses here offered to the public are not addressed to his immediate countrymen the Swiss. He supposes himself placed in the heart of France ; and it is to the peculiar circumstances of that country that this publication is accommodated, (Prel. Ref. p. 44. vol. i.) France, indeed, exhibits at present an aspect altogether new among civilized nations. From the beginning of the revolution to the year 1802, France may be said to have had no religious education, and scarcely any education whatever within

the reach of her youth. The consequence is, that the most active part of her population, and nearly three fifths of her soldiers and sailors, have attained the maturity of bodily strength, without any moral, and with very little intellectual culture. Inheriting all the advantages which are derived from the successful cultivation of the arts, and possessing every imaginable physical capability, a numerous nation of this description would be an object of terror, under any degrees of latitude or longitude; but must excite still greater alarm in the centre of the civilized world! That such men may gain battles, and, when stimulated by the hope of plunder, may astonish or overwhelm other nations, has been sufficiently proved. But whether they can enjoy rational freedom at home, and discharge, in times of tranquillity, the duties of good citizens, is yet to be tried. Constitutional liberty, indeed, is now out of the question: and M. Necker seems to have had a prophetic intimation of the state of the government, when, in the year 1798, he declared—

‘ It is not, indeed, the reestablishment of our ancient slavery in its former shape which we have now to dread, but the approach to it in a disguised form, as soon as it shall be discovered that the most vigorous exercise of authority is unable to restrain a people who have shaken off all religious controul. The silence and subordination of slavery will be attained, by raising and maintaining immense armies; by filling up their ranks with our young men; by making those young men exchange the conflict of other passions for the rigour of military discipline; and by employing those armies, in all their violence and energy, to inspire universal terror. What a sad substitute for religious morality! What an exchange for that authority, of which the injunctions were so mild, and the exercise so indulgent! How dreadfully have we been deceived!’
Prelim. Refl. p. 24. vol. i.

The avowed design of M. Necker’s work, therefore, is to counteract the operation of this tremendous evil, and to revive religious impressions in France, by an appeal to the united powers of reason and revelation. In this design, every good man will wish him success, though many will doubt if he be qualified to obtain it. He divides his course of religious morality into five sections; in all, containing twenty-nine sermons. The first section has four sermons, which treat of the bases of natural religion and morality. These sermons are on the existence of a God; the union of morality with the divine perfections; the doctrine of a Providence; and the immortality of the soul. The second section discusses the duties common to all men, such as truth, justice, charity. The third section is taken up with the relative duties of the different ages and situations of social life; such

such as those of husband and wife, parent and child. The fourth contains sermons on the sentiments and habits of mind which render men guilty or miserable; as, envy, vanity, ambition, &c. And the fifth and last section treats of the Christian religion, and of irreligious systems.

He does not touch on any of the peculiar doctrines of Christianity; nor does he enter upon any investigation of the external proofs which are usually adduced in support of the Christian scheme. The internal evidence is only casually glanced at. He appears indeed to have assumed the Christian character, rather from a sense of its utility or expediency, than from a conviction of its truth; and his sermons are to be considered as deistical essays written in a Christian country.

M. Necker explains his motives for adopting the plan just mentioned, in fifty-two pages of preliminary reflections, which are better written than any other portion of the work. He seems to think that his method is new, because the discourses have a sort of connexion with one another, and because he draws from natural religion alone the authority of his instructions; and contents himself with hinting, in a very general way, at the aid which Christianity affords them (Prel. Refl. p. 43. vol. I.).—There is certainly nothing new, or very meritorious, in all this arrangement; and it is indeed inconsistent with the author's eulogy on Scripture in p. 40. It is equally inconsistent with the supposition, that the discourses are addressed to a popular audience in France. He does not specify the rank or education of his supposed hearers; and, while he says that he considers himself as preaching like an aged pastor to a popular audience, he confesses that he has not omitted any philosophical reflection that occurred, and that 'his succinct code of religious morality is to be distinguished from other collections of sermons, by its being *intended to be read*, and by its containing a connected train of moral and religious instruction.' (Prel. Refl. p. 44.)

This is challenging a more rigorous criticism than, we are afraid, M. Necker is able to stand. The greater part of his discourses are composed in so diffuse and declamatory a style, as could only be justified by the design of pronouncing them in a popular assembly; and even upon this supposition, they will often be found deficient in dignity and consistency of expression. To us, indeed, it appears that he sometimes, in his introductions to his discourses, dreams of addressing a numerous and motley audience; but, in the course of his sermon, many are perceived to fall asleep, or to slip out of the church, until at length he sees only a couple of politicians or false philosophers, to whom he addresses himself for a long time, in a whining strain of lyric vociferation;

feration ; and then concludes as he began. Making every allowance for his good intentions, how shall we reconcile some of the following passages with M. Necker's judgment and good sense ?

In order to prove the existence of a God, he makes choice of Exodus, ch. 3. v. 14. for his text, (our author preaches, like others, from texts of scripture)—‘*Je suis celui qui suis*,’ a still worse translation than our ‘ I am that I am ; ’ and breaks out into the following address :

‘ How great, how imposing is this expression, for giving us an idea of the Essence of the Creator and Master of the world ! It is as if he had said to the children of Israel, and by them to the whole earth—No definition, no image, can explain to your minds, or represent to your senses, an eternal Being, who has plac'd an immense distance between himself and the highest period of your moral faculties, between himself and the last boundary of the researches and conquests of genius. Yes, the heavens of heavens are between God and man,’ &c. Vol. I. p. 3.

Now, whatever the idea may be, the mere French expression, *Je suis celui qui suis*, is neither more nor less than an identical proposition. It is neither *great*, therefore, nor *imposing* ; nor does it give any *idea* of any *essence* whatever.

Amidst his other exclamations of wonder at the greatness of the works of nature, which he considers as a conclusive proof of the being of a God, we find the following satisfactory reflection :

‘ O prodigies ! prodigies ! and which surpass our understanding !—But every thing is done, every thing is *explained* in the universe by two eternal principles, the Almighty power of its Master, and his immense beneficence.’ Vol. I. p. 14.

And afterwards,

‘ We may perceive the system of final causes developing and extending itself in an universal manner, with as much regularity as precision.’ Vol. I. p. 21.

This precise developement of all final causes, must undoubtedly prove very consolatory to the minds of M. Necker's disciples. In truth, whoever peruses this discourse on the existence of a God, will find neither philosophical reasoning nor scriptural authority in his matter ; nor in his style, that clearness and simplicity that is requisite in so high an argument ; but must rest contented or discontented with a goodly assortment of ‘ les grands mots qui épouventant l'oreille.’

In his discourse on Providence, the author says,

—‘ he had shown that morality was founded upon our knowledge of the perfections of God, upon our knowledge of the perfections of a Master,

Maker, whose eyes are too pure to bear the sight of evil.' Vol. I.
p. 65.

This, however, is more, we apprehend, than the author had shown, or could show. The acknowledgment of *any perfections* in the Divine nature, and consequently of the existence of a good principle and of a Providence, implies a power of moral discrimination already existing in the human mind. This moral faculty cannot therefore be said to be *founded* upon our knowledge of the perfections of a God. On the contrary, it is only by attending to our own moral perceptions that we can form a conception of what the Divine attributes are; and nothing is more plain, than that, without such a power in ourselves, we could not distinguish perfection from imperfection. We willingly admit, indeed, that our belief in a God, in a superintending Providence, and in the other salutary doctrines inculcated by scripture, or suggested by reason, yields consistency and great additional strength to our moral perceptions; but it cannot be urged that these perceptions are founded upon that belief. Although external objects exist independently of our senses, yet without these senses, they would have no existence for our minds.

M. Necker proceeds to one of the most important of all doctrines, the immortality of the human soul. He divides his proofs into two heads: 1. Those which arise from the perfections of the Divine Being; and, 2. Those which refer to the nature of the soul itself (vol. I. p. 97.) Neither of these is systematically followed out, nor indeed illustrated by any reasoning which deserves attention. He seems, however, to have forgotten this two-fold division in p. 120, where we find him saying—

'The nature of our mind (*spirit*), the mystery of our conscience, the involuntary homage we pay to moral ideas, the frequent oppression and misery of good men, and, above all, the goodness, wisdom, and infinite power of the Supreme Being; these are the considerations which support our hope in the precious doctrine of the immortality of the soul.' Vol. I. p. 97.

The arguments deducible from the nature of the mind itself, are not stated by our author in any order, or urged with any ingenuity. There is no topic, indeed, upon which he appears to less advantage, although it seems to have been his favourite speculation. Instead of dwelling upon our natural desire of immortality, the feelings of remorse, the progressive improvement of our faculties, or the analogy of the material world, M. Necker confines himself, in a great measure, to the negative argument derived from the immateriality of the soul, and to another argument, which is of so singular a nature that we must lay it before

fore our readers in M. Necker's own words. He very properly calls it new, and announces it in this elegant sentence :

‘ Meanwhile, it is our duty to present you with a new motive of hope. We still search for it, and we still find it in ourselves, in this sublime nature, where so many phenomena are reunited, and where we distinguish the impression of the Divine seal, better than in any other of its (nature's) magnificent conceptions.—*We love!*—we know,—we desire to love ! ’ Vol. I. 120.

He goes on in this rapturous strain for a very long while, and uses many high-sounding sentences to shew that the power of loving is a pledge and proof of immortality. Then he asks,

‘ Is not this sentiment, which transports us into a beloved object, and which places in it all our interests; is it not the image of a second life? Is it not the symbol of our continuity with a new essence?’ Vol. I. p. 122.

This argument is certainly entitled to the praise of novelty. We cannot easily determine, indeed, whether it has been exceeded, in point of puerility, by any former argument on a serious subject. But it is not only to those who have had lawful opportunities of loving in this world, that the benefits of this new argument are to be extended. The humane preacher is pleased, very politely, to assure old bachelors and old maids, that they too shall have their share in it.

‘ Ah! Ye also have similar vows to make: ye tender friends, loving souls, and who have never been able to find on earth an associate, worthy of the delicacy of your sentiments, console yourselves; live in hope; there will be for you a futurity, in which the perfection of your nature shall find its counterpart.’ Vol. I. p. 126.

If we turn from the author's reasoning to his style, we shall find that they are both equally desultory and unsuitable to the purposes of grave and manly instruction. In the beginning of a sermon upon Death, for instance, we have a specimen of his manner of introducing himself to his audience.

‘ Death! Death! What a name I am pronouncing! Death! All flies, all disappears before it. What a dismal and terrible image am I about to offer to your thoughts! The spring has painted our fields, the earth is adorned with new splendour, the flowers, the plants, the bushes, our gardens, our meadows, all is animated; all is embellished! Death! and shall you,’ &c. Vol. III. p. 152.

What shall we say of this introduction to a serious sermon upon Death, by an aged philosopher and man of the world? One would almost be tempted to reply to the boyish preacher, in the language of Malherbe,

• La Mort a des rigueurs à nulle autre pareilles ;
 On a beau la prier ;
 La cruelle qu'elle est, se bouche les oreilles,
 Et nous laisse crier.'

In truth, the greater part of the discourses, we are afraid, will be deemed, by severe critics, mere common-place sermons; remarkable for nothing but an unusual quantity of truisms, silly exclamations, barren thoughts, entangled with metaphysical sophistries, and hyperbolical phrases, beyond even the present puerile style of French declamation.

It is unpleasant to dwell on the omissions or absurdities of a well-disposed man; and more particularly in cases where he professes to promote the cause of good order, religion and morality: but it is a duty to rescue that venerable cause out of the hands of unskilful advocates, and to point out to others the untenable posts in which they were defeated: *Quid enim tam necessarium quan-*
tenere semper arma, quibus vel tectus ipse esse possit. vel provocare
integros, vel te ulcisci lacestus? Whether men contend with the weapons of argument or of steel, judgement and arrangement are equally indispensable; and in both cases it may be truly said, that an open enemy is less to be dreaded, while standing in the hostile ranks, than a cowardly or undisciplined friend in our own. M. Necker, by his injudicious disputations, has exposed to the scorn of every sneerer, his arguments from reason, on the very important doctrines of 'The Existence of a God;' 'The Foundation of Morals;' and the 'Immortality of the Human Soul.' We do not know that religion could have been more injured, by a direct attack upon the evidences of revelation.

While, however, we regret that M. Necker should have wasted so much of his time in writing sermons; and while we condemn his declamatory style, and reprobate his unphilosophical réasonnings, we acknowledge, with pleasure, that some detached passages have renewed our old feelings for '*the honest man, and the man of virtue and genius.*'* If his sentiments are not always expressed with the precision, arrangement, and accuracy, which we might expect from a regularly trained preacher, or even from an accomplished financier and statesman, like Necker; yet they are always amiable and humane. Humanity is the characteristic of his writings; and it is impressed on all the sermons contained in these volumes. The eloquence and spirit of the following passage claim our respect.

* They, (the violent revolutionists of France,) they have made of merit a subject of proscription; of the laws, an instrument of hatred;

of

of Equality, a preparation for tyranny ; of the word Liberty, the badge of slavery ; of maxims of morality, a language of hypocrisy ; of religion, an insult to the Supreme Being ; and of the purest blood, the most execrable orgies. Political passions, how terrible ye are ! Nothing restrains you ; nothing retards your impetuosity ; and you reckon the lives of men but a trifling sacrifice for the object which you wish to attain. Listen to those orators, who, with hands reeking in blood, would inspire a whole nation with their own destroying fury ! One said, we cannot offer too many victims to Liberty ; another said, too many cannot be sacrificed to Equality ; another, to the principles of the rights of man ; another, to the mystic dogma of the sovereignty of the people : and, finally, another professing, from lips foaming with rage, the love with which he feels himself inflamed for posterity, will sacrifice to this pretended love, to this hypocritical sentiment, every individual of his contemporaries !' Vol. I. p. 138.

Nor is it merely in such descriptions, and in the reprobation of revolutionary and political violence, 'quorum pars magna fuit,' that M. Necker is lively and interesting. There is something very touching in the following description of the concluding scene of a young soldier's life :

' Alas, had you seen those young men, ye tender fathers, ye affectionate mothers ! Behold your sons thrown down, and lying trampled in the dust by the hoofs of their comrades' horses : left bleeding amidst furious squadrons, who pay no attention to their groans : carried at last to hospitals, where the numbers of the wounded render assistance impracticable ; where novices in surgery serve the apprenticeship of their art, amidst hurry and interruption, and the agonizing cries of their unhappy patients. Your miserable son wishes he had perished on the field of battle ; regrets the fond tenderness you showed him in infancy : he remembers the last embraces of the authors of his being : he looks about him, and sees, in the moment that remains of life, the mutilated limbs of his companions scattered around—and that his own grave is preparing.' Vol. I. p. 153.

If M. Necker deserves the censure which has been sometimes passed upon him as a flatterer of the French nation or government, it is not, at least, in the following passage :

' Ah, let us respect the opinions of other nations, not in order to grieve us, but to support our wisdom and our modesty : Let us give no cause to this reproach fixed on us by some. You wished to dictate laws to the universe, and you cannot regulate your own domestic concerns : You wished to give plans of government to all nations, and your own plan, full of the greatest errors and imperfections, is an inexhaustible source of factions : You have indeed shown yourselves abroad as roaring lions, but you have been miserably tame at home, and you

crouch under the rod of despotism : You have already called yourselves the *Great Nation*, and you see no other people disputing this title : But the extent of a country, and the number of its soldiers, may strike its neighbours with terror, without creating respect.' Vol. I. p. 281.

The following passage describes, in a natural way, the feelings of a man of nice sensibility, immediately upon his fall from a station of high rank and power. To these feelings M. Necker was no stranger : and we pity his misery, when he answered Mr Gibbon—' dans l'état où je suis, je ne puis sentir que le coup de vent qui m'a abbâtu.'

' It is to you I address myself—ye who were lately in possession of the surest means of pleasing, and of captivating men. You were believed to stand on the summit of authority ; through you every favour was dispensed : You were objects of universal pursuit and attachment ; when, all at once, fortune overturned your pedestal : You are cast down into the crowd ; you have neither rank, nor credit, nor power ! How do your friends, even your real friends, then act ? They come around you, condole with you, and perhaps redouble their cares and attentions :—but there is a correctness in their care, an attentiveness in their manner, and a measured proceeding in all their conduct. They delicately conceal the idea they have of their generosity towards you : meanwhile, you yourself either discover or suspect it ; and you are stung to the soul. You are conscious that, in the eyes, even of friendship, a change has taken place in you ; and that you must take care to be cautiously discreet. Sad discovery ! ' &c. Vol. II. p. 17.

Of M. Necker's present work, the most useful part, in our opinion, is that which treats of irreligious systems. He dwells at considerable length on the formidable arguments against Christianity, which are supplied by the absurdities and crimes of its professors. His endeavours to prove, that the abuses of that humane system do not militate either against its beneficent tendency, or its actual good effects, are not destitute of ingenuity. He had associated long and intimately with freethinkers, and knew the objections to the Gospel, which they urged with most triumph and most baneful effects on the minds of the young. These he combats with some energy ; and he persuades his readers to the reception of Evangelical morality with affectionate earnestness.

' The exaggeration and the abuse of useful truths, can exist only until these truths are proscribed or brought into discredit : but when a poisonous plant attaches itself to a tree which yields abundance of good fruit and shelter, is it the tree we are to extirpate ? ' Vol. III. p. 262.

We might select many other respectable passages from the work before us ; but those already quoted are a sufficient specimen of

M. Necker's pulpit eloquence. The sermons seem to have cost him little trouble : indeed we were sometimes tempted to believe that he has only lent his name, or partial aid, to an inferior performer. But whether this be the case, or that M. Necker has written *invit. Minerva*, certain it is, that the discourses before us, while they evidently appear to proceed from the best intentions, and although they contain some scattered fragments of argument and of eloquence, betray a grievous decline of judgment, perspicacity, and logical discrimination, in their responsible author. We do not hesitate to warn young persons against a partiality for such flimsy compositions. They are very much in the present fashionable and false continental style. An imperfect view of the system of religion is given ; and, instead of a sober elucidation of the evidence upon which it rests, or a persuasive enforcement of the moral duties which it recommends, we have exclamations and loud assertions, and strainings after sublimity and pathos, that excite the ridicule of the profane, and the regret or disgust of the pious.

This manner of preaching may, like the present terrific mode of novel writing, rouse the curiosity of the idle ; but it can neither remove doubt, nor influence conduct : And those who place confidence in the course of religious morality published by M. Necker, in the hope that it can enlighten their reason, or fortify their faith, will soon join in the candid and mortifying confession—

‘ A peine, du limon où le vice m’engage
J’arrache un pied timide et fors en m’agitant,
Que l’autre m’y reporte et s’embourbe à l’instant.’

ART. IX. *A New Anatomical Nomenclature, relating to the Terms which are expressive of Position and Aspect in the Animal System.*
By John Barclay, M. D. Lecturer on Anatomy, and Honorary Member of the Royal Physical Society, Edinburgh. Longman & Rees, London. 8vo. pp. 182. 1803.

A CHANGE in the language of any science, is rendered necessary, either by the sudden acquisition of new information with respect to its fundamental truths, or by the gradual accumulation of various dialects, partly founded upon theories, partly derived from accidental peculiarities in the situation of discoverers, and the consequent introduction of ambiguity and error. Both these circumstances concurred to warrant the great and beneficial alteration which the nomenclature of chemistry has lately undergone ; but it is in the latter, only, that the necessity of a new anatomical vocabulary can be found.

The purposes to which a systematic plan of nomenclature is subservient, are threefold : It adds to the regularity and beauty of the science ; it facilitates the business of instruction ; and it assists us in the discovery of new truths. Upon each of these distinct objects, a few preliminary remarks may be permitted, as leading to an illustration of the principles on which all such schemes as the one now before us ought to proceed.

The pleasure derived from the contemplation of abstract relations, forms by far the greatest part of the inducement to scientific research. There is unquestionably a delightful sensation in the discovery of resemblances that are unexpected and not easily perceived—a sensation entirely unconnected with any view to the useful consequences which may be deduced from the knowledge of the new truth. The perception of the relation between the hypotenuse and the sides of a right-angled triangle, is as agreeable to the mind, as the knowledge that, by this celebrated discovery, we are enabled to guide the course of a ship in the pathless ocean. Nay, the perception of unexpected practical utility itself, is pleasing to those who have neither any chance of receiving the benefit, nor any capacity to sympathise with others. A man who studies the laws of the celestial motions, seldom thinks of the ultimate advantages to which his inquiries may lead—the construction of tables useful to the navigator. He is satisfied, that he discovers the certainty of a simple and easily comprehended relation, which was not previously supposed to exist.

One great merit of such discoveries, then, is the neatness of the form in which they are capable of being presented to the mind. This is, indeed, the greatest excellence of any scientific proposition, if we except the apparent dissimilarity of the objects compared. No pleasure would be derived from a demonstration, however clear, that the three angles of a triangle, if each of them is two thirds of a right angle, are, together, equal to two right angles. The identity is here too obvious, and the discovery of it could give no satisfaction, unless to beings of faculties much more dull than the human. But it would be equally impossible for us to derive any great pleasure from the enunciation of a proposition, however general, in which a relation is affirmed, after a variety of assumptions, and new definitions, and previous demonstrations of lemmas. We might be reconciled to the labour of following such a chain of reasoning, by the idea, that it ultimately led to consequences of practical importance ; but, for its own sake, we should certainly feel little interest in the discovery. This neatness, or conciseness and simplicity, with which we can enunciate and demonstrate a truth, surprising either by its generality, or the number of the steps required for reaching it, constitutes what is called

called the elegance of any scientific discovery ; and the elegance of a system is, in like manner, the regularity with which its departments are ordered, and the similarity of their connexions with the fundamental principles. The concise and simple expression of this regularity, in the structure of the language appropriated to describe and enumerate those various parts, is productive of the same satisfaction, and completes the agreeable uniformity ; while it enables us to enjoy the same kind of pleasure in scientific details, that we receive from beauty of style in works of imagination. The pleasure derived from mathematical speculations, is surely in a great measure owing to the simplicity and uniformity of the nomenclature which the science of necessary truth employs. The higher geometry, for instance, would cease to present us with so many interesting objects of contemplation, if the analogous parts of different curve lines were known by different names, and parts entirely dissimilar were, from certain insulated cases of coincidence, permanently confounded under the same appellations ; if (e. g.) the asymptote were sometimes denominated the focus, or if the tangents of whole orders of lines were called secants, because those of some curves cut the arcs which they do not touch. The pleasure derived from the study of modern chemistry, is, in the same manner, augmented by the systematic nature of the new language. With all its faults, that language does not confound simple and compound bodies, nor distinguish substances entirely analogous. Many of its terms have indeed been objected to as changes too violent, upon words meant to denote ideas of very frequent recurrence. Thus, we are told that common salt is a better name than muriate of soda ; and surely, in the same manner, *round* would, in ordinary life, be a more convenient because a more familiar expression than *circular*, and *oval* than *elliptical*. But if the other compound salts are distinguished by the union of terms denoting their component parts ; an agreeable uniformity, in a scientific point of view, results from the extension of the same principle of nomenclature to that salt which is most commonly used, although it may retain its old name on ordinary occasions ; just as it is more agreeable to denominate the ellipsis from the property analogous to those of the other conic sections, although, in common life, we give it a name derived from the elliptical body most frequently met with ; and to talk of the ordinates and asymptote of a conchoid, although masons speak only of the diameter and shaft of a column. In short, all science consists of classification ; and the plans now under consideration, are founded upon verbal arrangement, while they keep the classification of ideas constantly in view.

But, great as the use of a systematic nomenclature is, in promoting the most important end of all speculative pursuits—the abstract pleasure of contemplation, its advantages are still more apparent in facilitating the acquisition of knowledge. The learner has in fact only to fix in his memory the few leading principles of the language, and he can from thence easily deduce the particulars of the vocabulary. He has thus at least one general medium of connexion, one species of assistance to the recollection of the subordinate relations, which he may afterwards learn, between the things signified, over and above those other helps which are common to all kinds of nomenclature. It may, however, be remarked, that where the objects of discussion are of constant occurrence, and are necessarily known by their vulgar names long before the student has occasion to view them in a scientific light, the systematic nomenclature throws some little difficulty in his way. If the great body of instruction, too, is only to be found in authors who have used an irregular language, the acquisition of the science, by means of the new-modelled nomenclature, may render that instruction inaccessible, or at least create the necessity of a double labour in the acquisition of terms. The science of anatomy is in this predicament; and Dr Barclay has therefore proceeded much more cautiously in proposing alterations, than the French chemists found it necessary to do in changing the nomenclature of a science which had itself undergone so sudden a revolution. The new system of *measures* seems fated to experience unsurmountable opposition, for this very reason. It may be possible, after learning chemistry or anatomy in a new language, to acquire the synonymes of the old: But, as no human memory can retain the combinations of numerals, the whole systems of preceding calculators must either be utterly useless, or they must be wrought over again upon the new principles.

It is by no means necessary, for the assistance of the learner, that the name of an object should be descriptive. On the contrary, if we consider how often descriptions proceed upon theory, and how seldom they apply distinctly, we shall be inclined rather to pronounce, that the framers of a scientific language should take the other extreme; and instead of always attempting to denominate an object by its peculiarities, should distinguish it by its known relations to other objects, making the roots of the whole insignificant words, or words in vulgar use. The French chemists have been singularly unfortunate in their choice of roots, however excellent their principles of combination. Although we know only of one species of air which can either support animal life or flame, they have named it by another property, which it does not appear to possess exclusively. And they have distinguished

ed another species by the quality of destroying animal life, although this is by far the most ordinary property of the gases. In the same manner, they have rejected the term *inflammable air*, and substituted one which describes a quality not peculiar to a single gas. A variety of other objections to the descriptive method adopted in the chemical nomenclature, will immediately occur to our readers. But, in fact, whatever terms may be used as the foundation of any nomenclature, the derivation soon ceases to be thought of. No chemist, when he uses the word azote, ever stops to consider how fatal that substance is to the lungs. The material point is to have the combinations uniform, and, where it is possible, to choose such radical words as are in common acceptation; or, if new ones must be coined, to adopt such as are easily remembered; and to proceed in the choice upon no hypothetical principles. The scheme proposed by Dr Barclay meets with our approbation, in proportion as he appears to have been guided by a regard to such considerations. The following remarks upon the nomenclature of the muscles, suggest instances in the old language of Anatomy exactly parallel to those which we have taken from the new French system.

* Some names are a kind of descriptions, pretending to explain uses and functions, which those who imposed them did not understand. In all cases these descriptions are extremely imperfect; often are false: and should we credulously receive them as complete, and proceed to reason upon them as data, they must always lead to erroneous conclusions. On this principle, some muscles are named pronators and supinators of the radius; some flexors and extensors of the carpus; as if these were the only muscles concerned in performing such movements. Now, every anatomist certainly knows, that all the digital flexors and extensors that arise from the humerus or fore-arm, must likewise be flexors and extensors of the carpus; that the sublimis, the radial flexor, and palmaris longus, assist in pronation; that the supinator radii longus brings the arm to the middle position, between pronation and supination, and then acts as a flexor of the fore-arm; that the biceps, attached to the scapula and radius, is an extensor of the humerus, a flexor of the radius, and one of the most powerful of its supinators; while other muscles, as the extensor tertii interosseus pollicis, although indirectly, occasionally assists it, in that office. From the variety, therefore, of functions, in which muscles attached to the bones are usually concerned, every name imposed with a view to denote these functions, must either be uncommonly long, or extremely imperfect, with regard to description. p. 11. 12.

The last great use of a systematic nomenclature—the promotion of new inquiry, is too obvious to require any illustration. Whatever contrivance simplifies our vocabulary, must of course leave

the mind more at leisure for the comparison of ideas. A systematic language actually saves, in every process of reasoning, a variety of steps. These steps were gone through by the inventor of the general method, for all the subordinate cases; and the inquirer, who wishes to carry the detail farther than his predecessors have done, needs only carry on the application. What, in fact, was the grand change effected upon geometry, by Des Cartes, but the introduction of a new and general nomenclature into that science?

In the introduction to the work now before us, Dr Barclay points out, at some length, the various evils arising from the ambiguity of the terms at present used in anatomical description; and offers some very judicious remarks upon the plans of improvement proposed by other authors. We extract the following observations, on the scheme of Dumas, to name the nerves from their origin and termination, as a very favourable specimen of our author's acuteness, and talent for illustration.

' He proposes to distinguish the trunk (of the olfactory nerve) by the term *striato-narinal*; the division which terminates at the ethmoidal bone, by the term *striato-narinal-ethmoidien*; and the part which is ramified on the pituitary membrane, by the term *striato-narinal-pituitaire*. This tiresome repetition of the name of the trunk, in the names of all the divisions and branches, would not only be exceedingly cumbersome, but unnecessary. In the system of Linnaeus, man belongs to the genus *homo*, to the order of *primates*, and the class of *mammalia*: but did it ever enter the mind of that naturalist to suppose that the genus would be better expressed by the term *mammale primus homo*, than by simple *homo* taken by itself? A name is one thing, classification another, and description a third. From not making this necessary distinction, Dumas, in trying to impose names, is constantly labouring at a sort of classification and description; so that his descriptions are often bad names, and his names more frequently worse descriptions.'

p. 31. 32.

Before entering upon the immediate subject of the Essay, Dr Barclay discusses the general topic of Language, its kinds and changes, at a length perhaps somewhat unnecessary. The object of these preliminary chapters is to illustrate the intimate connexion between spoken and written language, and to enumerate the various circumstances which render both subject to perpetual fluctuations.

' The third chapter is employed in shewing, that the language of science should be distinct from that of the people; and the fourth contains our author's general ideas upon the changes of anatomical nomenclature.

The three last chapters are occupied with a detail of the changes which he recommends.

The following is a general outline of his plan.

In describing the vertebral column, anatomists call the bone nearest to the head the *atlas*, and the mass of vertebrae at the opposite extremity, the *sacrum*. In systematic connexion, these occupy corresponding regions, in all animals in which they are found. Dr Barclay therefore proposes the words *atlantal* and *sacral*, instead of *superior* and *inferior*. Instead of the words *anterior* and *posterior*, which are used to express the breast and the back in all animals, the terms *sternal* and *dorsal* are suggested. The words *dermal* and *central*, denoting what points to the skin, and what to the centre, or *peripheral* and *central*, when speaking of an organ, are substituted for *external* and *internal*, when they signify what is superficial and deep. When they are employed to express the side or middle of a surface, suppose a plane to pass along the middle of the neck, the mediastinum and linea alba, and to divide the neck and trunk into similar halves, from the sternum to the dorsum, and let this plane be denominated *mesian*; the words *lateral* and *mesial* will, in such a case, convey the meaning of external and internal. *Right* and *left* might still denote the lateral parts of the trunk, but *dorsal* and *sternal* are thought preferable, for the reasons assigned in the general observations on language.

Much ambiguity has arisen, from using the words *right* and *left*, *anterior* and *posterior*, in describing the different parts of the heart. To avoid these inaccuracies, Dr Barclay proposes to divide the vascular system into two parts; to call one *systemic*, the other *pulmonic*; expressing by the former term, all those vessels, whether arteries or veins, which convey the blood from the lungs to the different parts of the body; and by the latter, those vessels which convey the blood from the system at large to the lungs. Thus the pulmonary veins, the left sinus, auricle and ventricle of the heart, with the *aorta* and all its branches, will be called *systemic*; while the bronchial veins, the veins of the head, heart, trunk, and extremities, the right sinus, auricle and ventricles, circling the pulmonary artery and its branches, will be distinguished by the epithet *pulmonic*.

Besides removing ambiguity, says our author, another advantage that naturally arises from this change in the nomenclature is, that instead of being obliged to enumerate the vessels in which the purple or the vermillion blood is contained, we may say at once that the purple is contained in all the *pulmonic* vessels, and the vermillion in all the *systemic*, whether veins or arteries.

The extremities are to be distinguished by epithets borrowed from the regions of the trunk with which they are connected; the

the *superior* called *atlantal*, and the *inferior*, *sacral*. It is proposed to distinguish the ends of these bones by the terms *proximal* and *distal*, according as they are near to, or at a distance from, the trunk. The *atlantal* extremities again are subdivided into *radial* and *ulnar*, to signify the two lateral parts, and into *anconal* and *thermal*, to express the other two sides.

Dr Barclay next proceeds to shew, how a similar division and arrangement may be applied to the *sacral* extremities.

These new terms, in general, are entitled to the praise of great clearness and simplicity, though we are inclined to doubt the possibility of bringing them into general use. If there be any of this new nomenclature, considered as a theory, in which we should be inclined to dissent from the author, it is that which relates to the vascular system. The division of the circulation into two parts is judicious: and *Bichat* (*tom. 2. Anatomie Generale*) we find has made a division, in all its essential parts, precisely the same; and has alleged similar reasons for making such an alteration. This coincidence may be considered as fortunate, while it shews the propriety of making some change. The few objections that we have to make, are to the terms *systemic* and *pulmonic*, which do not appear so happily chosen, as the others which Dr Barclay has suggested. These terms, when applied to the heart alone, express distinctly the two different parts, the auricles and ventricles, in man, and the *manumalia*; but when they are extended to the other parts of the system, and to the lower animals, ambiguity seems likely to arise. In the first place, it may be remarked, that the centre of circulation is made to rest in the lungs, and not in the heart, as hitherto supposed. This is implied, by the new words, which express the carrying the blood from the lungs to the system, and returning it to the lungs, from the system at large. Now, the circulation of the blood differs according to the different structure of the heart, and the organs of respiration, in different animals. In the amphibia, and in fishes, the heart has only one ventricle and one auricle; and in insects, and some of the vermes, only a ventricle, and no auricle. Indeed, our author remarks, 'that the vessels of their lungs (the amphibia,) in some measure correspond in function to our bronchials; and that their blood, undergoing a change from the action of the air, is entirely confined to systemic veins.' (p. 124.) Hence it appears, that there is no foundation for this distinction into two sets of vessels, named with reference to their lungs; which in these animals have a small share in the circulation, and in insects and the vermes still less, where the blood undergoes some salutary changes from the *spiracula*, which are extended over all parts of their bodies. It may be said, that these terms are not intended for the amphibia, or cold-blooded animals, but are calculated to express the difference

ence between them and animals with warm blood. But is not this in direct opposition to the plan and intention of the author, who proposes to adopt terms which will admit of a general application to all parts of the animal kingdom?

Some difficulty strikes us, when we apply these new terms to the *fœtus in utero*. In this case, the right auricle and ventricle must be called both pulmonic and systemic; because the auricle sends some of its blood through the *foramen ovale*, and the ventricle through the *ductus arteriosus*, to the system at large. To any one already acquainted with the difference between the circulation in the *fœtus* and the adult, this may appear intelligible; but it does not seem calculated to simplify the description of this intricate part of anatomy, or to render it more easily comprehended by young students. The vessels which convey blood from the lungs, to the system at large, form but an inconsiderable part of the circulation in the *fœtus*, and therefore deserve not the title of systemic, according to the definition which is given. The *umbilical vein* would rather lay claim to this epithet, as it carries blood of a red colour, after it has undergone some necessary changes in the *placenta*. The *vena portæ*, too, will be both a systemic and pulmonic vessel; because it serves indirectly to convey the blood from the lungs to the liver, for a purpose very important to the system at large, the secretion of the bile; while, at the same time, it conveys a considerable portion of blood from the abdominal viscera to the lungs. It may be objected, that the *hepatic artery* is the systemic vessel of the liver; but the relative offices of this artery, and the *vena portæ*, are not yet so well understood, as to lead us to such a distinction.

Where the etymology of a word will assist in explaining the situation or function of any part, it ought surely to be preferred. For although the technical meaning may be determined by a definition, yet it is difficult to divest ourselves of the idea which the etymology conveys. Thus, to talk of the *pulmonic* vessels of the leg and arm, must appear strange to any one who had ever heard of the vessels of the heart and lungs which have received that name. No reason is alleged for making the particular term *pulmonic* a general one, or for rendering a word particular, whose strict meaning is general. All the vessels of the body, might be called *systemic*, as forming a part of the whole system; but few of them can properly be termed *pulmonic*, because a small number only belong to the lungs. Perhaps it would have been better, to have suggested two new terms, which had never been in use, if any new terms are necessary, for expressing the arterial and venous circulation. But it has been already observed, that no alterations in names should be made, unless absolutely required; since nothing

thing impedes the diffusion of knowledge more, than the multiplicity of technical terms, and variety of nomenclature. Therefore, we humbly conceive, as the terms *systemic* and *pulmonic* do not admit of general application to all the lower animals; as they appear to involve some ambiguity in their etymological sense; and as they do not promise any great advantages from their use, they ought not to be adopted, to the exclusion of those well-known terms, the arteries and veins.

These objections are thus cursorily submitted to the learned author's consideration, rather as hints for farther investigation and improvement, than from a conviction of their validity and force.

After having given this general sketch of Dr Barclay's Essay, we shall not detain our readers, by following him through all his other curious and interesting remarks, on several miscellaneous subjects. He suggests new terms for describing the head and face in different animals, which appear extremely correct and satisfactory. By slight changes in the termination of the new words, they are made to express, clearly and accurately, all the necessary modifications of which their general meaning is susceptible. When they end in *al* or *an*, they denote simply position or aspect: by changing their termination into *en*, they express a different sort of connexion; and when they end in *ad*, they are used adverbially. Sound is a quality much less important than sense; yet it is not wholly to be disregarded. Some persons, may therefore be offended by the cacophony produced by words with such harsh terminations. Examples may indeed be adduced from the Greek, French, and German languages, in favour of words terminating in *en* and *ad*; but it must be remembered, that the harshness is here softened by the pronunciation, or by the arrangement which their inversions allow. In our own language, some of these terminations may be found; but these are chiefly in monosyllables, or in the participles of some verbs. These objections can be of no weight to technical terms; and if they are found sufficiently expressive, the ear and the vocal organs will soon be reconciled to their use. For various illustrations of the different suggestions that have been noticed in this outline, we must refer to the work itself; which contains also some plates, with the new artificial signs marked upon the skeleton, to exhibit more concisely their meaning and design.

With regard to the style of Dr Barclay's tract, it is upon the whole sufficiently perspicuous; though perhaps, in several respects, somewhat more adorned, and even a little more learned than the nature of the subject required.—A few inaccuracies have arrested our eye in a work upon language. *Vocables* (page 93), is neither

neither French nor English. *Nomenclaturing* (page 109), is likewise a new word. In page 142, *will* is twice used for *shall*. And we scarcely approve of *mediums*, (page 97), and *craniums*, (page 147).

ART. X. *Amadis de Gaul*. By *Vasco Lobeira*. From the Spanish Version of *Garciodonez de Montalvo*. By Robert Southey. Four Volumes 12mo. London.

Amadis de Gaul: A Poem, in Three Books. Freely Translated from the First Part of the French Version of Nicolas de Herberay, Sieur des Essars. With Notes, by William Stewart Rose, Esq. 12mo. London.

THE fame of *Amadis de Gaul* has reached to the present day, and has indeed become almost provincial in most languages of Europe. But this distinction has been attained rather in a mortifying manner: for the hero seems much less indebted for his present renown to his historians, *Lobeira*, *Montalvo*, and *Herberay*, than to *Cervantes*, who selected their labours, as one of the best known books of Chivalry, and therefore the most prominent object for his ridicule. In this case, as in many others, the renown of the victor has carried down to posterity the memory of the vanquished; and, excepting the few students of black letter, we believe no reader is acquainted with *Amadis de Gaul*, otherwise than as the prototype of *Don Quixote de la Mancha*. But the ancient knight seems now in a fair way of being rescued from this degrading state of notoriety, and of once more resuming a claim to public notice upon his own proper merits; having, with singular good fortune, engaged in his cause two such authors as Mr Southey and Mr Rose. As the subject of the two articles before us, is in fact the same, we shall adopt the prose version of Mr Southey, as forming the fullest text for the general commentaries which we have to offer; reserving till the conclusion, the particular remarks which occur to us upon Mr Rose's poem.

Mr Southey has prefixed to his translation certain preliminary notices, which, by an odd and rather affected arrangement, he has split into sections or chapters, numbered 1st, 2d, 3d, &c.; a division which is the more arbitrary, as no titles are given to these sections. Many readers, thus left to conjecture the causes and purpose of the arrangement, must find themselves at a loss; and we readily confess ourselves to be of the number: for an unbroken

broken inquiry respecting the author of Amadis, occupies most of the paragraphs thus unnecessarily detached from each other. This inquiry, particularly connected as it stands with the history of romance in general, has claim to our peculiar attention.

The earliest copy of Amadis de Gaul, now known to exist, is the Spanish edition of Garcia Ordóñez de Montalvo, which is used by Mr Southey in his translation. Montalvo professes, in general terms, to have revised and corrected this celebrated work from the ancient authorities. He is supposed principally to have used the version of Vasco de Lobeira, a Portuguese knight who died in the beginning of the 15th century. But a dispute has arisen, whether even Lobeira can justly claim the merit of being the original author of this famous and interesting romance. Nicolas de Herberay, who translated Montalvo's work into French in 1575, asserts positively, that it was originally written in that language; and adds this remarkable passage: ‘*J'en ay trouvé encores quelques restes d'un vieil livre écrit à la main en langage Picard, sur lequel j'estime que les Espagnols ont fait leur traduction, non pas de tout suivant le vrai original, comme l'on pourra voir par cestuy, car ilz en ont omis en aucuns endroits et augmenté aux autres.*’ Mr Southey, however, setting totally aside the evidence of Herberay, as well as of Monsieur de Tressan, who also affirms the existence of a Picard original of Amadis, is decidedly of opinion, that Vasco de Lobeira was the original author. It is with some hesitation that we venture to differ from Mr Southey, knowing, as we well know, that his acquaintance with the Portuguese literature entitles him to considerable deference in such an argument: yet, viewing the matter on the proofs he has produced, and considering also the general history and progress of romantic composition, we incline strongly to think with Mr Rose, that the story of Amadis is originally of French extraction.

The earliest tales of romance which are known to us, are uniformly in verse; and this was very natural: for they were in a great measure the composition of the minstrels, who gained their livelihood by chanting and reciting them. This is peculiarly true of the French minstrels, as appears from the well-known quotation of Du Cangé from the Romance of Du Guesclin, where the champions of romantic fiction are enumerated as the subject of their lays.

ROLLANS

*Les quatre fils HAIMON, et CHARLON li plus grant
Li dus LIONS DE BOURGES, et GULON DE CONNANS
PERCEVAL LI GALOIS, LANCELOT, et TRISTANS
ALEXANDRE, ARTUS, GODEFROI li sachans
De quoy cils menestriers font les noble romans.*

There

There are but very few prose books of chivalry in the world, which are not either still extant, or are at least known to have existed originally in the form of metrical romances. The very name by which such compositions are distinguished, is derived from the *romance* or corrupted Latin employed by the minstrels, and long signified any history or fable narrated in vulgar poetry. It would be almost endless to cite examples of this proposition. The Tales of Arthur and his Round Table, by far the most fertile source of the romances of chivalry, are all known to have existed as metrical compositions long before the publication of the prose folios on the same subject. These poems the minstrels used to chant at solemn festivals: nor was it till the decay of that extraordinary profession that romances in prose were substituted for their lays. The invention of printing hastened the declension of poetical romance. The sort of poetry employed by the minstrels, differed only from prose in being more easily retained by the memory; but when copies were readily and cheaply multiplied by means of the press, the exertion of recollection became unnecessary.

As early as the fifteenth century, numerous prose versions of the most celebrated romances were executed in France and England, which were printed in the course of the sixteenth. These works are now become extremely rare. Mr Southey attributes this to their great popularity. But if their popularity lasted, as he supposes, till they were worn out by repeated perusal, the printers would have found their advantage in supplying the public with new editions. The truth is, that the editions first published of these expensive folio romances were very small. Abridgments and extracts served the purpose of the vulgar. Meanwhile, the taste of the great took another turn; and the books of chivalry disappeared, in consequence of the neglect and indifference of their owners. More than a century elapsed betwixt their being read for amusement, and sought for as curiosities; and such a lapse of time would render any work scarce, were the editions as numerous as those of the Pilgrim's Progress.

To return to our subject—It appears highly probable to us, that Lobeira's prose Amadis was preceded by a metrical romance, according to the general progress which we observe in the history of similar productions.

Another general remark authorises the same conclusion. It is well-known that the romances of the middle ages, were not announced to the hearers as works of mere imagination. On the contrary, they were always affirmed by the narrators to be matter of historical fact; nor was this disputed by the simplicity of the audience. The gallant knights and lovely dames, for whose delight these romances were composed and sung, were neither shocked by the incongruities of the work, nor the marvellous turn

turn of the adventures. Some old tradition was adopted for the subject of the tale; favourite and well known names were introduced. An air of authenticity was thus obtained; the prejudices of the audience conciliated: and the feudal baron believed as firmly in the exploits of Roland and Oliver, as a sturdy Celt of our day in the equally sophisticated poems of Ossian.—Hence, the grand sources of romantic fiction have been traced to the Brut of M.ister Wace, himself a translator of Geoffrey of Monmouth, who put into form the traditions of the bards of Wales and Armencia; to the fabulous history of Turpin, from which sprung the numerous romances of Charlemagne and his twelve Peers; and, finally, to the siege of Troy, as narrated by Dares Phrygius, and to the exploits of Alexander. Other and later heroes became also the subject of romance. Such were William of Orange, called *Short-nose*, Richard of Normandy, Ralph Blundeville Earl of Chester, Richard Cœur de Lion, Robert the Bruce, Bertrand du Guesclin, &c. &c. The barons also, before whom these tales were recited, were often flattered by a fabulous genealogy which deduced their pedigree from some hero of the story. A peer of England, the Earl of Oxford, if we recollect aright, conceived himself to be descended of the doughty Knight of the Swan; and, what is somewhat to our present purpose, the French family of Bonneau deduce their pedigree from Dariolette, the complaisant confidant of Elisene, mother to Amadis.—See Mr Rose's work, p. 52.

- A Portuguese minstrel would therefore have erred grossly in choosing for his subject a palpable and absolute fiction, in which he could derive no favour from the partialities and preconceived opinions of those whose applause he was ambitious to gain. But if we suppose Amadis to have been the exclusive composition of Lebeira, we must suppose him to have invented a story, not only altogether unconnected with the history of his own country, but identified with the real or fabulous history of France, which was then the ally of Castile, and the mortal foe of Portugal. The difficulty is at once removed, if we allow that author to have adopted from the French minstrels a tale of their country, founded probably upon some ancient and vague tradition, in the same manner as they themselves had borrowed from the British bards, and Geoffrey of Monmouth, their translator, the slender foundation upon which they erected the voluminous and splendid history of Arthur, and the doughty chivalry of his Round Table. This is the more probable, as we actually find Amadis enumerated among other heroes of French romance mentioned in an ancient collection of stories, called *Cürfor Mundi*, translated from French into English metre.

Men lykyn jessis for to here,
 And Romans rede in diverse manere,
 Of Alexandre the conquerour ;
 Of Julius Cæsar the emperour ;
 Of Greece and Troy the strong frysse ;
 There many a man lost his lyf ;
 Of Brut, that baron bold of hond,
 The first conquerour of England ;
 Of Kyng Artour, that was so ryche ;
 Was nou in his tyme so ilyche ;
 Of wonders that among his knights fell,
 And auntyrs deden as men her telle :
 As Gaweyn and othir full abyille,
 Which that kept the round tabyll ;
 Hou King Charles & Rowland fawghte
 With Sarazins nold thei be cawght ;
 Of Trifram and Yfoude the swete,
 Hou thei with love first gan mete ;
 Of King John & of Iuibras ;
 Of Ydoine and Amadas.

Warton's History of Poetry.

If the hero last mentioned be really Amadis de Gaul, the question as to the existence of a French or Picard history of his exploits, is fairly put to rest. For, not to mention that the date of the poem above quoted is at least coeval with Vasco de Lobeira, it is admitted, that no French translation of the Portuguese work was made till that of Herberay in 1575 ; and, consequently the author of the *Curser Mundi* must have alluded to a French original, altogether independent of Lobeira's work.

Mr Southey himself, with the laudable impartiality of an editor, more attached to truth than system, has produced the evidence of one Portuguese author, who says that Pedro de Lobeira translated the history of Amadis de Gaul from the French language, at the instance of the Infant Don Pedro. *Agustegio Lusitano*, tom. i. p. 48. — Now, although this author has made a mistake, in calling Lobeira, Pedro, instead of Vasco, yet his authority at least proves, that there existed, even in Portugal, some tradition that Amadis had originally been composed in French, although the authors of that country have, with natural partiality, endeavoured to vindicate Lobeira's title to the fame of an original author *. One singular circumstance tends to corroborate

VOL. III. NO. 5.

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* The evidence of Nicola Antonia, in the *Vetus Hispanæ Bibliotheca*, it, as remarked by Mr Rose, extremely inconclusive. He adds *ut satis est* to his affirmation that Lobeira was the original author of Amadis, and quotes the equally cautious expression of Antonius Augustinus—“Quarum fabularum primum fuisse auctorem Vascum Lobeiram, Lufitanij editant.” *Amadis de Gaule*, a poem, Introd. p. vi.

what is stated in the *Agiologio*. It is certain that the work was executed under the inspection of an Infant of Portugal; for Montalvo expressly states, that at the instance of this high personage, an alteration, of a very peculiar nature, was made in the story. The passage, which is curious in more respects than one, is thus rendered by Mr Southey.

' At the end of the 41st chapter, it is said that Briolanja would have given herself and her kingdom to Amadis; but he told her, right loyally, how he was another's. In the Spanish version, ss. 72, this passage follows—“ But though the Infante Don Alfonso of Portugal, having pity upon this fair damsel, ordered it to be set down after another manner, that was what was his good pleasure, *and not what actually was written of their loves*; and they relate that history of these loves thus, though, with more reason, faith is to be given to what we before said:—Briolanja, being restored to her kingdom, and enjoying the company of Amadis and Agrayes, persisted in her love; and, seeing no way whereby she could accomplish her mortal desires, she spake very secretly with the damsel, to whom Amadis, and Galaor, and Agrayes, had each promised a boon, if she would guide Don Galaor where he might find the Knight of the Forest. This damsel was now returned, and to her she disclosed her mind, and besought her, with many tears, to advise some remedy for that strong passion. The damsel then, in pity to her lady, demanded, as the performance of his promise, from Amadis, that he should not go out of a certain tower till he had a son or a daughter by Briolanja; and they say, that, upon this, Amadis went into the tower, because he would not break his word; and there, because he would not consent to Briolanja's desires, he remained, losing both his appetite and his sleep, till his life was in great danger. This being known in the court of King Lisuarte, his lady Oriana, that she might not lose him, sent and commanded him to grant the damsel's desire; and he having this command, and considering, that by no other means could he recover his liberty, or keep his word, took that fair Queen for his leman, and had by her a son and a daughter at one birth. But it was not so, unless Briolanja, seeing how Amadis was drawing nigh to death in the tower, told the damsel to release him of his promise, if he would only remain till Don Galaor was arrived; doing thus, that she might so long enjoy the sight of the fair and famous knight, whom, when she did not behold, she thought herself in great darkness. This carries with it more reason why it should be believed; because this fair Queen was afterwards married to Don Galaor, as the fourth book relates.’ Introduction, p. vii.

It seems to us clear, from this singular passage, that the work upon which Lobeira was busied, under the auspices of the Infant Don Alfonso, or what Infant soever was his patron, must necessarily have been a translation, more or less free, from some ancient authority. If Amadis was the mere creature of Lobeira's fancy,

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the author might no doubt be unwilling, in compliance with the whimsical compassion of his patron for the fair Briolania, to violate the image of ideal perfection pictured in his hero, to which fidelity was so necessary an attribute ; but he could in no sense be said to interpolate *what actually was written*, unless he derived his story from some authority, independent of the resources of his own imagination.

We do not think it necessary to enter into the question, how far the good taste and high spirit displayed in this romance, entitles us to ascribe it exclusively to the French. The modest assurance with which Monsieur de Treffan advances the claim of his nation upon this ground, is, as Mr Southey has justly observed, a truly French argument. We have not, however, that very high opinion of the Portuguese character, about the conclusion of the 14th century, which has been adopted by Mr Southey. We recollect that the ‘good and loyal Portuguese, who fought at Aljubarrota for king Joam of good memory,’ were indebted for that victory to Northberry and Hartfell, the English mercenaries, who arranged their host in so strong a position ; to the headlong impetuosity of the Gascon, Berneze, and French adventurers, who composed the van of the Spanish army ; and to the jealousy or cowardice of the Castilians, who refused to support their auxiliaries : So that little of the fame of that memorable day, can in truth be imputed to the courage of the Portuguese. At that time, indeed, Castile and Portugal were rather the stages whereon foreigners exercised their courage in prize-fighting, than theatres for the display of national valour. Edward the Black Prince, John of Gaunt, John Chandos, and Sir Edward Knowles, fought in those countries, against Bertram of Clefquy and the flower of French chivalry ; but we hear little of the prowess of the inhabitants themselves. Such an insolent superiority was exercised by the English and Gascons, who came to the assistance of the king of Portugal, that, upon occasion of some discontent, they erected the pennon of St George as a signal of revolt ; elected Sir John Soltier, a natural son of the Black Prince, to be their captain ; and proclaimed themselves, *friends to God, and enemies to all the world* ; nor had the King any other mode of saving his country from pillage, than by complying with their demands. Indeed, it is more than probable, that both Portugal and Spain, would have fallen under the dominion of England, if the port wine, which now agrees so well with the constitution of our southern brethren, had been equally congenial to that of their martial ancestors : ‘ But the Englyshmen founde the wynes there so strong, hot and brinning, that it corrupted their heads, and dried their bowelles, and brente their lightes and lyvers ; and

they had no remedy ; for they could fynde but lytill good water to tempre their wynes, nor to refresh them ; which was contrary to their natures ; for Englyshmen, in their own countries, are sweetly nourished ; and there they were brent both within and without.' To such circumstances was Portugal occasionally indebted to safety, at the hands of her too dangerous allies. It seems to us more than probable, that, during these wars, the French or Picard original of *Amadis*, was acquired by Lobeira from some minstrel, attendant upon the numerous Breton and Gascon knights who followed the banners of the Earl of Cambridge, or the Duke of Lancaster ; for to Brittainy or Aquitaine we conceive the original ought to be referred.

But while we cannot believe, against the concurring testimony of Herberay and Treffan, as well as against the usual progres of romantic composition, that *Amadis de Gaul* is, from beginning to end, the invention of Lobeira ; yet, we conceive enough may safely be ascribed to him, to warrant the praises bestowed on him by Mr Southey, and perhaps to entitle him to the name of an original author. We do not indeed know, the precise nature of Lobeira's work, nor what additions have been made to it by Montalvo ; but it is easy to conceive that it must have been something very different from the Picard original. In making some remarks on the style and structure of *Amadis*, we shall endeavour to contrast them with those of the earlier romance.

The metrical romances differed in many most material particulars from the prose romances by which they were superseded. The former partook of the character of the rhapsodists, by whom they were usually composed, and always sung. It was vain to expect from the ignorant minstrels, or those who wrote for them, a well connected history : nor, if they had been capable of such a refined composition, could its beauties have been relished by their audience, to whom they had seldom time to sing above one or two of the adventures contained in a long romance. Their narration was therefore rambling and desultory. One adventure followed another, without much visible connexion ; the only object of the author being, to produce such detached pieces as might interest during the time of recitation, without any regard to the unity of the composition. Thus, in many cases, the only connexion seems to arise from the same hero figuring in all the adventures, which are otherwise as much detached from each other, as the scenes in the box of a showman. But when a book was substituted for the minstrel's song, ~~when~~ the adventures of a *preux chevalier* were no longer listened to by starts, amid the roar of convivial festivity, but furnished the ~~imprisonement~~ of the closet, and that in so permanent a shape, that the

the student might turn back to resume the connexions which had escaped him ; it became the study of the author to give a greater appearance of uniformity to his work. As an arrangement, in which all the incidents should seem to conduce to one general end, must soon have become a merit with the reader ; it became, necessarily, to the author, a worthy object of attainment. Hence, in the best of our prose romances, and particularly in *Amadis de Gaul*, a combined and regular progress of the story may be discovered ; whereas the metrical romances present, with a few exceptions, a suite of unconnected adventures, often striking and splendid indeed in themselves, but appearing rather an assemblage of loose materials for a history, than a history itself. But the advantage, thus gained by the prose romances, was often lost, by carrying too far the principle on which it was grounded. Having once regularly completed a story, good taste and judgement required them to stop, and chuse for their future labours some subject unconnected with what was already perfect. But this was not the genius of the age. When they had secured an interesting set of characters, the authors could not resist the temptation of bringing them again upon the stage ; and hence, the endless continuations with which *Amadis* and the other romances of that class, were saddled, and of which Mr Southey complains with so much justice. Only four books of *Amadis* are genuine. The remaining twenty are an interpolation, containing the history of his descendants, in all respects greatly inferior to the original.

In another point of view, it appears to us not quite clear that the prose romancers obtained any superiority over their poetical predecessors. The rude poetry of the minstrels was no doubt frequently rambling and diffusive ; partaking, in short, of those faults which naturally attach to unpremeditated composition. But we doubt greatly, whether the studied and affected ornaments of the prose romance are not more tedious and intolerable than the rhapsodies of the minstrels. Mr Southey, in his translation of *Amadis*, has, with due attention to modern taste, shortened the long speeches of the lovers, and simplified many of their high-flown compliments. On the other hand, the custom of interweaving the history with little descriptive sketches, which, in many instances, were very beautiful, was dropt by the prose narrators, as an unnecessary interruption to the continuation of the story. We allude to such passages as the following, which are introductions to the *Fytes* of the unpublished romance of Merlin. The ancient orthography is altered, for the sake of modern readers.

In time of winter along * it is,
 The fowls lesen their bliss,
 The leaves fallen off the tree,
 Rain rusheth along the country ;
 Maidens lose their lovely hew,
 But still they loven that be true.

In May is merry time swithe,
 Fowls in wood they make them blithe,
 Swains 'gin on justing ride,
 Maidens dressen them with pride.

Merry it is in the month of June,
 When fennel hangeth abroad in town ;
 Violet and roses flower
 Groweth then on maidens bower ;
 The sun is hot, the day is long ;
 The small birds maketh merry song.'

Of such passages, which serve to relieve the heaviness of the perpetually recurring fight and tournament, the prose romance affords us no example. The ornaments which it presents, are those of studied description, every word of which is laboured, as applicable to the precise scene which is described, without expressing or exciting any general sensibility of the beauties of nature. We may take, as no unfavourable instance, the account of the tower and gardens constructed by Apollidon in the Firm Island.

* In that tower were nine apartments, three on a floor ; and though some part was the work of skilful artifices, the rest was wrought by the skill and science of Apollidon himself, so wonderfully, that no man in the world could rightly value, nor even understand its exceeding rarity. And because it would be long to describe it all at length, I shall only say, that the tower stood in the midst of a garden, surrounded with a wall of goodly stone and mortar ; and the garden was the goodliest that might be seen, by reason of its trees and herbs, and fountains of sweet water. Of those trees, many were hung with fruit the whole year through, and others bore flowers ; and round about the garden by the walls, were covered walks, with golden trellis-work, through which might all that pleasant greenness be seen. The ground was covered with stones, some clear as the crystal, others coloured like rubies and other precious stones, the which Apollidon had procured from certain islands in the East, where jewels, gold, and other rare things are produced, by reason of the great heat of the sun continually acting. These islands are uninhabited, save only by wild beasts ; and, for fear of those beasts,

no man durst ever set foot thereon, till Apollidon, by his cunning, wrought such spells, that it became safe to enter there; and then the neighbouring people, being assured of this, took advantage thereof, and ventured there also; and thus the world became stocked with sundry things which it had never before known. To the four sides of the tower, water was brought from the neighbouring mountains by metal pipes, and collected into four fountains; and the water spouted so high from the golden pillars, and through the mouths of animals, that it was easy to reach it from the windows of the first story; for it was caught in golden basons wrought on the pillars; and by those fountains was the whole garden watered.' *Anadis*, vol. IV. p. 13.

From comparing the flight, extemporary, and natural landscape-sketches of the ancient minstrel, with the laboured and minute picture of Lobeira or Montalvo, the reader may derive some idea of the marked difference between the style of the more ancient tales of chivalry, and those by which they were succeeded. The description of the minstrel appears almost as involuntary as it is picturesque, and is enlivened by the introduction of the birds, the dames, and the gallant knights. The prose author seems to have sat down to describe Apollidon's tower, his water-pipes, Kensington gravel walks, and Dutch trellis, with a sort of *malice prepense* against his reader's patience: and his account exactly resembles the plan and elevation of a capability-man or architect. The following contrast regards a scene of a more animated nature, and, of all others, that which occurs most frequently in romance.

- * Alexander made a cry hardi,
“ Ore tost, aby, aby.”
Then the knights of Achaye
Justed with them of Arabye:
Egypt justed with them of Tyre,
Simple knights with rich syre.
There ne was forgiſt, ne forbearing,
Between Vavasour or King.
Before men mighten and behind,
Contest seek, and contest find.
With Persians fought the Gregois;
There was cry, and great hontois;
There might men find his peer;
There lose many his destrier; *
There was quicke in little thrawe;
Many gentil knight y-slave;
Many arm, many heavod,
Sone from the body reaved;

Many gentle ladye
 There lost quickly her *ami* ;
 There was many y-maimed ;
 Many fair penfill bebledde ;
 There were swords liklaking ; †
 There were speres in blood bathing :
 Both Kings there, sans doute,
 Y-dashed in with all their ronte ;
 Many lands, both near and far,
 Lost their Lords in this war.
 Earth quaked of their riding ;
 The weather thicken'd of their crying ;
 The blood of them that were y-flawe,
 Ran by floods to the lawe. ’

In this description, as in the former, may be traced the spirit of the poet, warning as he advanced in narration ; from the encountering of the hosts, when war, like death, levelled all distinction betwixt the vassal and monarch, to the fall of the loves of ladies and the lords of domain, to the bloody banners, clashing swords and gory lances, until the ground shook under the charge of the combatants, the air was darkened at their shouts, and the blood of the dying poured like torrents into the valley. The following is the description of the grand battle betwixt Lisuarte and Aravigo, in which the timely assistance of Amadis, with his father, gave the victory to the father of Oriana.

¶ Presently (King Lisuarte) went down the side of the mountain into the plain ; and as it was now upon that hour when the sun was rising ; it shone upon their arms ; and they appeared so well disposed, that their enemies, who had before held them as nothing, now thought of them otherwise.—In this array, which you have heard, they moved slowly over the field one against the other.

¶ At this season, King Perion, with his sons Amadis and Florestan, entered the plain upon their goodly steeds ; and with their arms of the Serpents, which, shone brightly in the sun ; and they rode on to place themselves between the two armies, brandishing their spears, whose points were so polished and clear, that they glittered like stars ; and the father went between his sons. Much were they admired by both parts, and each would willingly have had them on his side ; but no one knew whom they came to aid, nor who they were. They, seeing that the host of Brian of Monjuste was about to join battle, put spurs to their horcs, and rode up near to his banner ; then set themselves against King Targadan, who came against him. Glad was Don Brian of their help, though he knew them not ; but they, when they saw that it was time, rose to attack the host of King Targadan, so fiercely, that all were astonished. In that encounter, King Perion struck that other

King

† Clashing.

King so hardily, that a part of the spear soon entered his breast, and he fell. Amadis smote Abdiasian the Fierce, so that armour nothing profited him, but the lance passed through from side to side, and he fell like a dead man. Don Florestan drove Carduel, saddle and man, under the horses feet : these three being the bravest of that battalion that had come forwards to combat the Knights of the Serpents. Then laid they hand to sword, and passed through the first squadron, felling all before them, and charged the second ; and when they were thus between both, there was to be seen what marvellous feats of prowess they wrought with their swords : such, that none did like them on either side ; and they had now under their horses more than ten knights whom they had smitten down. But when their enemies saw that they were no more than three, they charged them on all sides, laying on such heavy blows that the aid of Don Brian was full needful, who came up with his Spaniards, a brave people, and well horsed, and rode among the enemy, slaying and felling them, though his own men fell also ; so that the Knights of the Serpents were succoured, and the enemy so handled, that they perforce gave back upon the third battalion. Then there was a great press, and a great danger for all ; and many knights died upon either side : but what King Perion and his sons did there, cannot be expressed. Such was the uproar and confusion, that King Aravigo feared lest his own men, who had given ground, should make the others fly ; and he called aloud to Arcalaus, to advance with all the battalions, and attack in one body. This presently he did, and King Aravigo with him ; but without delay King Lisiarte did the same : so that the whole battle was now joined : and such was the clang of strokes, and the cry and noise of horsemen, that the earth trembled, and the valleys rung again.' Vol. III. p. 90.

In this last quotation, as in the former, the inferiority of Loberia is sufficiently manifest ; though his description is by no means void of spirit. It cannot be alleged that this is owing to the poetry ; for no modern will attribute much to the force of the minstrel's numbers ; and the author of *Amadis* is far from disclaiming the use of poetical ornament. The difference arises from the disposition to specification, and to exchange general effect for minute description, which we have already remarked as an attribute of the prose romance.

The most curious part, however, of this curious subject, respects the change in manners which appears to have taken place about the middle of the 14th century, when what we now call the Spirit of Chivalry, seems to have shone forth with the most brilliant lustre. In the older romances, we look in vain for the delicacy which, according to Burke, robbed vice of half its evil, by depriving it of all its grossness. The tales of the older metrical romancers, founded frequently on fact, and always narrated in a coarse and downright style, excite feelings sometimes ludicrous, and often disgusting ; and in fact can only be excelled by the unparalleled *sabliaux* published by Barbazan, which although professedly

professedly written to be recited to noble knights and dames, exhibit a nakedness, not only in the description, but in the turn of the story, which would now banish them even from a bagnio, unless of the very lowest order. The ladies in metrical romances, not only make the first advances on all occasions, but with a degree of vivacity, copied it would seem from the worthy spouse of Potiphar. For example, a certain knight called Sir Amis, having declined the proffered favours of the Lady Belisaunt, pleading his allegiance to his liege lord, receives from her the following sentimental rebuke :

- “ That merry maiden of great renown
 Answered, “ Sir Knight, thou has no *crown*— *
 For God that bought thee dear,
 Whether art thou priest or parson,
 Other art thou monk, other canon,
 That preachest me thus here ? ”
- “ Thou never shouldest have been a Knight,
 To go amongst maidens bright ;
 Thou shouldest have been a frere :
 He that learned thee thus to preach,
 The devil of hell I him biteche,
 My brother though he were.” *Amis & Amelion.*

As the damsels were urgent in their demands, the knights of these more early ages were often brutally obstinate in their refusal ; and instead of the gentle denial which the love-sick Briosania received from the courteous Amadis, they were too apt to exclaim like Bevis of Hamton, when invited to a rendezvous by the fair Josiana a Saracen princess—

- “ Forth the knights go can ;
 To Bevis’ chamber they came anon,
 And prayed, as he was gentleman,
 Come speak with Josian.
 Bevis stoutly in this stound
 Haf up his head from the ground
 ——————
 And said, “ If ye ne were messagers,
 I should ye slay, ye lossengers ;
 I ne will rise one foot fro’ grounde
 For to speak with an heathen hounde ;
 She is a hound, also be ye,
 Out of my chamber swith ye flee.”

All

* Art not shaved like a monk.

All this coarseness, in word and deed, was effectually banished from the romances of chivalry which were composed subsequent to 1350. Sentiment had begun to enter into these fictions, not casually, or from the peculiar delicacy of an individual author, but as a necessary qualification of the heroes and heroines whose loves occupied their ponderous folios.

Of this refinement we find many instances in *Amadis*. Balays of Corsante being repulsed by a damscl, explains his sentiments upon such points. ‘ My good lady,’ Balays answered, ‘ think no more of what I said : it becomes knights to serve damsels, and to woo their love, and becomes them to deny, as you have done : and albeit, at the first, we think it much to obtain of them what we desire, yet when wisely and discreetly they resist our inordinate appetites, keeping that without which they are worthy of no praise, they be even of ourselves more reverenced and commended.’ Notwithstanding this favourable alteration in their tone, the reader is not to understand that the morality of these writings was in fact very materially amended ; for at no period was the age of chivalry distinguished for female virtue. Those who have supposed the contrary, have never opened a romance written before the tomes of Calprende, and Scudery, and judge of Queen Guenever, Isault, and Oriana, by what they find there recorded of Mandane and Cassandra. But the genuine prose romances of chivalry, although less gross in language and circumstance, contain as little matter for edification as the tales of the minstrels, to which they succeeded. Lancelot du Lac is the adulterous lover of Guenever, the wife of his friend and sovereign ; and Tristram de Lionel the incestuous seducer of his uncle’s spouse, as well in the prose folios of Rusticien de Puise, and the Knight of the Castle of Gast, as in the rhimes of Chretien de Troyes and Thomas of Erceldoune. Nor did the tales of a more modern date turn upon circumstances more correct : witness the history of the Petit Iehan de Saintré, and many others. Of *Amadis*, in particular, Mr Southey has observed, that ‘ all the first-born children are illegitimate,’ because ‘ the hero must be every way irresistible.’ The same observation applies to most romances of chivalry ; so that one would be tempted to suppose that the damsels of those days, doomed frequently to wander through lonely woods infested by robbers, giants, and caitiffs of every description, were so far from trusting, like the lady in *Comus*, to the magic power of true virginity, that they hastened to confer upon some faithful knight a treasure so very precarious, while it was yet their own to bestow. But the modern man of gallantry will be surprised to hear, that this by no means diminished either the zeal or duty of the lover,

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who had thus attained the summit of his hopes. On the contrary, unless in the case of here and there a Don Galaor, who is always painted as a subaltern character, a *preux chevalier* was bound, not only to maintain the honour of the lady thus deposited in his custody, but to observe towards her the fidelity and respect of religious observance.* Every one knows how long Sir Lancelot had enjoyed the favours of Queen Guenever; and yet that scrupulous knight went distracted, and remained so till he was healed by the Sang-real, merely because by enchantment he was brought to the bed of the lovely Dame Elaine. As for Amadis, the bare suspicion which Oriana conceived of his infidelity, occasioned his doing penance on the Poor Rock in a manner unequalled, unless by the desolate knight who averred himself to have retired to a cavern, where he 'used for his bed mosie, for his candle mosie, for his covering mosie, and, unless now and then a few coals, mosie for his meat; a dry food, God wot, and a freth; but so moistened with wet tears, and so salte, that it was hard to conjecture whether it was better to feed or fast.' †

In short, the love of the knights-errant was like their laws of honour, altogether beyond the common strain of feeling, as well as incapable of being measured by the standard of religion and morality. Their rules of honour have in some degree survived the fate of their order; and we have yet fatal instances of blood-shed for a 'word of reproach,' a 'bratchet hound,' or such other causes of duel as figure in the tales of the Table Round. But the love which was not only fostered, but imposed as a solemn duty by the laws of chivalry, is now only to be traced in such a romance as is before us. It subsisted, as we have seen, independent of maidenly chastity and conjugal fidelity; and its source perhaps may be traced to a remote period of antiquity. Tacitus has noticed the respect in which women were held among the German tribes. The ladies of Britain were indulged with the privilege of a plurality of husbands; and those of Scandinavia, although they were limited to one, might divorce him at their pleasure. ‡ This sort of supremacy, the ladies appear at all

* The Cecils of Italy derive their order from the days of chivalry. The reader is referred to the *Memoires de Grammont* for an account of the duties expected from them.

† *Progresses of Queen Elizabeth*, Vol. II. p. 136.

‡ A curious instance may be found in *Eyrbiggja Saga*. Thordisa, the wife of Borck, an Icelandic chief, attempted to stab one Eyulf, the friend and guest of her husband. Borck interfering, administered

all times to have exercised over the descendants of the Northern tribes. It is true, as already mentioned, the homage paid their charms by the earlier heroes of chivalry, was interrupted and nullified by the roughness of their manners and expressions. To reverse the complaint of the Knight of the Burning Pestle, ‘ one whom Amadis had styled courteous damsel, Bevis would have called heathen hound ;’ but the duty of obeying the hefts, and fighting for the honour of a lady, was indispensable even among the earliest and rudest sons of chivalry. In the course of the fourteenth century, this was sublimated and refined to the most extravagant degree ; so that the secret, inviolable, and romantic attachment of Amadis to Oriana might be easily paralleled by similar passages from real history. Even the zeal of devotion gave way to this all-devouring sentiment ; and very religious indeed must the knight have been, who had, as was predicated of Esplandian, God upon his right hand, and his lady upon his left.

We cannot leave this part of our subject, without bestowing our warm commendations on Mr Southey, for disdaining to follow Tressan and Herberay, in the impure descriptions and obscenities which they have much oftener introduced, than found, in the Spanish original. Tressan in particular, whose talents and taste made it totally inexcuseable, dwells with infinitely higher gust upon the gallantries of Don Galaor, than upon the Love of Amadis ; and describes them with that vicious and perverted love of obscenity, which Mr Southey so justly reprobates, as ‘ peculiarly and characteristically the disgrace of French Literature.’ May a practice, so ominous to the morals and manly virtue of our nation, long be a stranger to the writings of those who profess to afford to Britons information or pleasure !

The manners described in *Amadis de Gaul* are, in other respects, strictly feudal and chivalrous. The points of right and honour which are discussed ; the rules of combat and of truce ; the high and rigid adherents to knightly faith, are all features of the 14th and 15th centuries. What may appear to the modern reader, one of the most strained instances of the latter, is the conduct of King Lisiuarte in the fourth book, to whom an old man presents a crown and mantle, under the condition, that he shall restore them

nistered to his wife some domestic chastisement. But mark the consequence. ‘ When Borck departed to Helgafell, Thordisa, standing before the door of the house, called witnesses to bear testimony that she divorced her husband Borck ; assigning for a cause, that he had struck her, and that she would no longer submit to such injuries. Thereupon the household goods were divided betwixt them.

them at his *cour pleniere*, or grant the suppliant a boon in their stead. On the appointed day, the crown and mantle, having been conveyed out of Lisuarte's custody by enchantment; the boon demanded by the stranger in lieu is, that Oriana, the daughter of Lisuarte, should be delivered up to him.

'Lisuarte exclaimed, Ah, knight, thou hast asked a great thing ! and all who were present were greatly grieved. But the King, who was the most loyal man in the world, bade them not trouble themselves. It is better, said he, to lose my daughter, than to break my word ; the one evil afflicts few, the other would injure all; for how would the people keep faith with one another, if they could not depend upon the King's truth ? And he commanded his daughter to be brought. When the Queen and her ladies heard that, they made the most sorrowful outcry that ever was heard: but the king ordered them to their chambers; and he forbade all his people to lament, on pain of losing his favour. My daughter, cried he, must fare as God hath appointed; but my word shall never be wilfully broken.'

Instances of a similar rigid adherence to knightly faith can be produced from real history. The Duke of Gueldres being on a journey through Prussia, was laid in wait for, and made prisoner by certain banditti, or adventurers, commanded by a squire named Arnold. When the Grand Master of the Teutonic Order heard what had happened, he marched against the castle where the Duke was confined, with so strong a force, that Arnold durst not abide his coming. Hereupon he said to his prisoner, 'Sir Duke, ye are my prisoner, and I am your master. Ye are a gentleman and true knight ; ye have sworn, and given me your faith. I think not to abide the master of Pruce ; he cometh hither with a great force ; tarry here, if you list ; I will carry with me your faith and promise.' To this he added the name of the place to which he retreated, and so left the Duke at liberty. The Duke waited the arrival of the Grand Master ; but was so far from considering it as absolving him from his captivity, that no entreaties nor representations, could stay him from acquitting his faith, by again putting himself into the hands of Arnold ; with whom he remained a prisoner, till he was ransom-ed by his friends.

The quarrel betwixt king Lisuarte and Amadis, because he would not bestow upon Galvanes the hand of his captive Madasima, and the dominion of the island which she inherited, and which he had conquered ; the manner in which Amadis and his kindred renounce the service of Lisuarte ; the mutual defiance which are formally exchanged betwixt them, are all in the high style of feudal solemnity, and are well worthy the attention of those who investigate the customs of the middle ages. The reader

er may compare the mode in which these defiance were received, with the deportment of the Black Prince, when he was served with a writ of summons to attend the Parliament at Paris. ‘When the Prince had read this letter, he had great marvel, and shook his head, and beheld fiercely the Frenchmen; and when he had a little studied, he answered in this manner: “Sirs, we will gladly go to Paris, to our uncle, sith he hath sent thus for us; but I assure you, that it shall be with bassinet on our head, and sixty thousand men in our company.” *Froissart.*

We have dwelt the more fully upon the manners of this romance, because they correspond exactly with those of the period in which it was written. In the romances which were composed during the declension of chivalry, the writers no longer painted from the life; the manners which they described were as fictitious as the adventures which they narrated; and the reader may look for such historical resemblances as we have noticed, with as little success, as if he were to consult a map for the situation of Taprobana, or the Firm Island.

We have already observed, that the story of Amadis is constructed with singular ingenuity. The unvaried recurrence of the combat with the lance and the sword, is indeed apt to try the patience of the modern reader; although the translator’s compassion has spared them some details, and ‘consolidated’ (as he rather quaintly says) ‘many of those single blows, which have no reference to armorial anatomy.’ But, in defiance of the similarity of combat and adventure, the march of the story engages our attention; and the successive events are well managed, to support each other, and to bring on the final catastrophe. It is not our intention to give a detailed account of the story; but the following sketch may excite, rather than forestall, the curiosity of the reader.

Perion, king of Gaul, the guest of Garinter, king of Brittany, becomes enamoured of the fair Elisene, daughter of that monarch, obtains a private interview, and departs to his own kingdom. The princess becomes pregnant, and, to hide her disgrace, the child, afterwards the famous Amadis, is placed in a cradle, and launched into the sea. He is found by a knight of Scotland, and carried to that kingdom, where he is educated as the son of his preserver. Meanwhile, Perion marries Elisene, and they have a second son, called Galaor, who is carried off by a giant, and brought up to feats of arms and chivalry. Amadis, in the interim, is brought by his foster-father to the court of Scotland, where he meets Oriana, daughter of Lisiarte king of Britain. To her he becomes warmly attached, and, when knighted, prevails on her to receive him as her cavalier. Thus animated, he sets

sets forth on his military career, to assist Perion of Gaul, who is only known to him as the ally of the Scotch monarch, against Abyes, king of Ireland, who had besieged Perion in his capital. But no knight-errant ever attains the direct place of his destination, when he happens to have one, without some *bye-battles*. Several of these fall to Amadis's lot; and he is involved in many dangers, through which he is protected by the friendship of Urganda the Unknown, a mighty enchantress, the professed patroness of his house. Arriving at length at the capital of Gaul, he terminates the war, by the defeat and death of Abyes, whom he slays in single combat. After this exploit, by means of tokens which had been placed in his cradle, he is recognised and acknowledged as the son of Perion and Ellisene. By this time Gandalac, the tutor of Galaor, conceived him to be ready to execute the purpose for which he had carried him off; namely, to maintain a battle on his account, against a brother giant who had injured him. Galaor having previously received the order of knighthood from his brother Amadis, though without knowing him, undertakes the combat, which terminates like all combats between giants and knights. Amadis, meanwhile, repairs to the court of Lifaarte, father of Oriana, and distinguishes himself by feats of chivalry, subduing all competitors by his courage, and attaching them to his person by his valour and liberality. Galaor runs a similar career, with this advantage over his brother, that he seldom fails to be repaid for his labours, by the distressed damsels whom he fortunes to relieve. At length Amadis, at the instigation of a certain dwarf, enters the castle of Arcalens, whose captives he releases, and whom he defeats in single combat. Here, nevertheless, he is made prisoner by enchanting it, and is in great peril, until released by the counter spells of his friend Urganda. The conjurer was, however, not to be provoked with impunity: he contrives, by a trick already noticed, to get into his possession the lovely Oriana; and, by another device, had well nigh slain her father Lifaarte, who was fortunately relieved by Galaor. An insurrection, fomented by Arcalens, is also quelled; and Oriana is rescued from the enchantress, by the irresistible arm of Amadis. His faithful services are rewarded, by possession of his mistress; and thus closes the first book of Amadis. Among other distressed princesses relieved by Amadis, chanced to be the lovely queen Briolanja,* who became desperately enamoured of her deliverer,

(being

* Although Cervantes states the dispute which occurred betwixt Don Quixote and Cardenio, in the Sierra Morena, to have respected the character of queen Madafima; yet the person meant must have been this queen

(being the same, indeed, whose hopeles passion excited the compassion of the prince of Portugal.) Oriana, from an inaccurate account of this affair, becomes jealous, and dispatches a severe and cruel message to Amadis. This reaches him, just as he had accomplished a notable adventure in the Firm Island, by entering an enchanted chamber, which could only be entered by the truest lover who lived upon earth. The message of Oriana drives him to distraction; he forswears arms, and becomes the companion of the hermit on the Poor Rock, where he does penance, till he is near death's door. The place of his residence at length comes to Oriana's knowledge, who, sensible of her injustice, recalls him to her presence, and of course to health and happiness. His return to the *island* of Windsor, where Lisuarte kept his court, is of the utmost importance to that prince, who reaps the advantage of his assistance, in a direful contest with Cildadan of Ireland, assisted by certain sons of Anak, whose names it would take us too much time to write, since few of them are under six syllables in length. This giant brood being routed and dispersed, Lisuarte is induced, by certain deceitful, flattering, and envious courtiers, to treat the services of Amadis with slight and neglect. Ere long, this coldness comes to an open breach: Amadis, and his friends and followers, formally renounce the service of Lisuarte; and all retire, with their heroic leader, to the Firm Island, the sovereignty of which he had acquired. Galaor alone, bound by repeated obligations to Lisuarte, continues to adhere to him; and thus the author artfully contrives, that the reader shall retain an interest, even in the party opposed to Amadis. Oriana, during the absence of her lover, is secretly delivered of a son, named Esplandian; but as the heroines of the author are all mothers before they are wives, so they are never trusted with the education of their own children. The little Esplandian is carried off by a lioness, from whom he is rescued by a saint and hermit, called Nasciano. He is educated by this holy man, and in process of time presented to his grandfather

VOL. III. NO. V.

I

Lisuarte,

queen Briolanja. For Elisabat the surgeon, the person who gave the scandal, was the servant and attendant of Briolanja, not of Madalima. Besides, the character of the latter was untainted (the story of her having twins by Amadis being altogether apocryphal), whereas even the knight of La Mancha could not have vouch'd for the chastity of Madalima, who was one of the numerous mistresses of Don Galaor, and otherwise a lady of light conditions. Don Galvane is supposed to have married her only for her fortune, and had therefore the greater right to resent Lisuarte's attempt to deprive him of it. If this be not an accidental mistake of Cervantes, he referred to some history of Amadis, very different from that of Montalvo.

Lisuarte, and received into the train of his own mother. During this long space, Amadis wanders about the world, redressing wrongs, slaying monsters, and turning the tide of battle against the oppressors, wherever he comes. He has even the generosity (in disguise) to assist Lisuarte in a very desperate battle with Aravigo, a powerful monarch, whom the inveterate enchanter Arcalaus had stirred up against the king of Britain. But the emperor of Rome, El Patin, as the romance calls him, sends to Lisuarte, to demand the hand of his daughter Oriana; and the king, seduced by ambition, is ill-advised enough to force his daughter to this marriage, in spite of the advice of his best counsellors. Amadis repairs, under a new disguise, to Britain; and the knights sent by the emperor to receive his bride, sustain at his hands a thousand disgraces, unpitied by the English, to whom they were odious, for their insolence and presumption. At length, the princess is put on board the Roman fleet; but that fleet is intercepted, and after a desperate combat, finally defeated by a squadron fitted out from the Firm Island, to which Oriana is conveyed in triumph. The discretion of Amadis in his love, gave a colour to this exploit, totally foreign from the real cause. Amadis and Oriana, notwithstanding their long separation, meet like a brother and sister; and the knights of the Firm Island send to justify their proceedings to Lisuarte, declaring, that by his forcing her choice, his daughter was placed in the predicament of a distressed damscl, whose wrongs, by their oath of knighthood, they were bound to redress. The apology is ill received by the king of Britain; who, with the emperor of Rome, and all the allies who adhere to him, prepared to invade the Firm Island. Amadis, supported by his father king Perion, and many princes and queens who owed their crowns and honour to his prowess, assembles an army capable of meeting his enemy. Two desperate battles are fought, in which Lisuarte is finally worsted, but without being dismoured by a total defeat. The brunt of the day falls upon the Romans, whom the author had no motive for sparing, and the emperor is slain on the field. In the meanwhile, the sainted hermit Nasclano, who had educated Esplandian, and to whom Oriana had in confession revealed the history of her love to Amadis, arrives in the camp of Lisuarte, and by his mediation brings about a truce, both parties agreeing to retreat a day's journey from each other. But Lisuarte, whose army was much weakened, was, by this retrograde movement, exposed to much danger. Arcalaus the enchanter had had influence enough with king Aravigo, to prevail upon him to levy a huge army, with which he lurked in the mountains, waiting until Lisuarte and Amadis should have exhausted their strength in mutual conflict. Being in some measure

sure disappointed in his expectations, Aravigo held it for most expedient to fall upon Lisuarte in his retreat, whom, after a valiant resistance, he reduces to the last extremity : this is the moment which the author has chosen to exhibit the magnanimity of Amadis, and to bring about a reconciliation. The instant he hears of Lisuarte's danger, our hero flies to his assistance, and the reader will anticipate with what success : Aravigo is slain, and Arcalaus made prisoner, and cooped up in a cage of iron. The father of Oriana is reconciled to her lover ; and the introduction of Esplandian has its effect in hastening so desirable an event. The nuptials of Amadis and Oriana take place ; and the other heroines are distributed among the champions of the Firm Island, with great regard to merit. One thing yet remained :—To finish the enchantments of the Firm Island, it was necessary that the fairest dame in the world should enter the enchanted chamber. Need we add, that dame was Oriana ? ‘ Then was the feast spread, and the marriage-bed of Amadis and Oriana made in that chamber which they had won.’

Through the whole of this long work, the characters assigned to the different personages are admirably sustained. That of Amadis is the true knight-errant. Of him it might be said in the language of Lobeira's time, that he was ‘ true, amorous, sage, secret, bounteous, full of prowes, hardy, adventurous, and chivalrous.’ Don Galaor, the *Ranger* of knight-errantry, forms a good contrast to his brother. Lisuarte, even where swayed by the most unreasonable prejudices, shows, as it were occasionally, his natural goodness, so as always to prevent the total alienation of our good opinion and interest. The advantage given by the author to the vassals and dependants over the *Suzerain*, shows plainly a wish to please the numerous petty princes and barons at the expence of the liege lord. This may be remarked in many romances of Chivalry, particularly in those of Charlemagne and his Paladins. Even the inferior characters are well, though slightly sketched. The presumption of the Emperor, the open gallantry and dry humour of old Grumedan the King's standard-bearer, the fidelity of Gandalin squire to Amadis, the professional manners of Master Helisbad the physician, with many others, are all in true style and costume.

The machinery introduced in Amadis, does not, as Mr Southey observes, partake much of the marvellous. Arcalaus is more to be redoubted for his courage and cunning, than for his magic. Urganda is a fay similar to those which figure in the lays of Brittany, and, except her character of a prophetess, and some leger-de-main tricks of transformation, has not much that is supernatural in her character. We differ *toto celsu* from Mr Southey, in deriving

deriving this class of beings from classical antiquity : the nymphs and naïads of the Greeks and Romans in no shape meddled with magic ; nor were they agents out of the limits of their own proper elements. Some faint traces of Gentile superstition may be traced in the creed of the middle ages ; but the Oriental genii and peris seem the prototype of the faeries of romance. The very word faery is identified with the peri of the East, which, according to the enunciation of the Arabs or Saracens, from whom the Europeans probably derived the word, sounds *pberi*, the letter *p* not occurring in the Arabic alphabet. We do not mean, however, by any means, to adopt Mr Warton's system, which derives chivalry and romance exclusively from the East. On the contrary, although eastern superstitions, and particularly that of the fatæ, fadæ, or peri, seem to have been adopted by the romancers, the system of chivalry itself appears of northern origin ; and romance is chiefly indebted for its subjects to the historical traditions of the Celtic tribes, although the minstrels, by whom they were celebrated, were of Gothic extraction.

It remains to make some observations on Mr Southey's mode of executing his translation, which appears to us marked with the hand of a master. The abridgements are judiciously made ; and although some readers may think too much has still been retained, yet the objection will only occur to such as read merely for the story, without any attention to Mr Southey's more important object of exhibiting a correct example of those romances, by which our forefathers were so much delighted, and from which we may draw such curious inferences respecting their customs, their morals, and their modes of thinking. The popular romance always preserves, to a certain degree, the manners of the age in which it was written. The novels of Fielding and Richardson are even already become valuable, as a record of the English manners of the last generation. How much, then, should we prize the volumes which describe those of the æra of the victors of Cressy and Poitiers ! The style of Mr Southey is, in general, what he proposed, rather antique, from the form of expression, than from the introduction of obsolete phrases. It has something of the scriptural turn, and much resembles the admirable translation of Froissart.* Some words

* He that would acquire an idea of the language of chivalry, cannot too often study the work of Bourchier Lord Berners. It is with pain we see a new translation of Froissart proposed to the public. It is impossible that the spirit of that excellent author can ever be so happily transfused into modern English, as into the sterling language of Lord Berners. The liberality of the proposed translator would surely be

words have inadvertently been used, which, to us, favour more of vulgarity than beseems the language of chivalry. Such are the phrases, ‘ devilry,’ ‘ Sir Knave,’ ‘ Don False One,’ and some others. But we only mention these, to show that our general praise has not been inconsiderately bestowed.

Mr Southey has made an apology for not translating the names, which convey some meaning in the original: ‘ I have used Bel-nebros, instead of the Beautiful Darkling, or the Fair Forlorn; Florestan, instead of Forester; El Patin, instead of the Emperor Gosling; as we speak of Barbarossa, not Red-Beard; Boccane-gra, not Black Muzzle; St Peter, not Stone the Apostle.’ We cannot help thinking this apology as unnecessary, as the examples are whimsical. Proper names are never rendered into a familiar dialect, but with a view of making them ridiculous; although they are sometimes translated into a less known language, to give them dignity. Thus, Mr Wood is said to have been converted into *Dr Lignum*, and to have gained by the exchange; while it is well known, that the Portuguese ambassador, Don Pedro Francisco Correo de Sylva, was chased from the court of Charles the Second, by the ridicule attached to the nickname of *Pierre du Bois*, into which his sounding title was rendered by the Duke of Buckingham: and, surely, to talk of the Chief Consul *Good-part*, would be as absurd as the epithet would be inapplicable. As for Stone the Apostle, we have only heard of one bearing that name, who had also the fate of a prophet; for his doctrines were no otherwise honoured in his own country, than by the notice of the King’s attorney-general.

In one respect, where we were entitled, from Mr Southey’s well known poetical powers, to hope for great satisfaction, we have been most wofully disappointed. Instead of a version of the sonnets which occur in Amadis, executed by Mr Southey, he has been pleased to present the public with what himself calls the *shadow of a shade*, the translation from Herberay’s French into Anthony Munday’s English. We are surprised, that, in a book to which he places a name well known in the poetical world, he should admit such doggrel as,

‘ I lost my liberty, while I did gaze
Upon those lights, which set me in a maze;

be better employed in giving the public a new edition of the former translation, which is now become extremely scarce; and his learning and talents for literature would find no trivial employment in correcting mistakes, and collecting illustrations from cotemporary writers.

And of one free, am now become a thrall.
Put to such pain, thou serv'st thy friends withal:
And yet I do esteem this pain a pleasure,
Endured for thee, whom I love out of measure.

Leonor, sweet rose, all other flowers excelling,
For thee I feel strange thoughts in me rebelling,' &c.

There is another piece of incomprehensible nonsense, beginning,

' See that the victory of right deserved,
By wrong they do withhold, for which I served;
Now fith my glory thus hath had a fall,
Glorious it is to end my life withal,' &c.

The disgrace of this abominable stuff does not rest with poor *Anthony New-Now*, whose talents could afford nothing better; far less with the Spanish author, whose sonnets, though quaint, are not devoid of some merit; but with Mr Southey, whom we seriously exhort, in the name of poetry and common sense, to give us a decent translation in his next edition, and no more to shelter himself behind Munday for his verse, than he has done for his prose.

So much for the prose edition of *Amadis*, with the perusal of which we have been highly gratified.

We have already given it as our opinion, that the history of *Amadis* was, in its original state, a metrical romance. We remember, also, to have seen an Italian poem in Ottava Rima, called *Il Anadigi*, chiefly remarkable for the whimsical rule which the poet had imposed upon himself, of opening each canto with a description of the morning, and closing it with a description of the night. Mr William Stewart Rose has now favoured the public with a poetical version of the First Book of *Amadis*, containing the birth and earlier adventures of the hero, and closing with his gaining possession of Oriana.

In our remarks upon this poem, we are more inclined to blame, in some degree, Mr Rose's plan, than to find fault with the execution, which appears to us, upon the whole, to be nearly as perfect as the plan admitted. Mr Rose has indeed stated his pretensions so very modestly, that perhaps we are warranted in thinking, that a culpable degree of diffidence has prevented him from assuming a tone of poetry more decided and animated.

' That the extract I now present to the public,' says Mr Rose, ' is closely translated, I cannot venture to affirm. I have, I confess, attempted to introduce some of those trifling ornaments, which even the simplest style of poetry imperiously demands, and have,

have, in many instances, altered the arrangement, and very much contracted the narration of the original. I think, however, that I shall not be convicted of having, in my trifling deviations, introduced any thing which is at variance with the spirit or tone of the celebrated romance.'

With the alterations and abbreviations of Mr Rose, we have not the most distant intention of quarrelling; on the contrary, we think that his too close adherence to his original, is the greatest defect in the book. Mr Rose was not engaged in translating a poem, but in composing one; the story of which was adopted from a prose work. We therefore do not conceive that he was obliged to limit himself to trifling ornaments, or to the very simplest style of poetry. Even in modernizing ancient poetry, and that, too, the poetry of Chaucer, containing no small portion of fire, Dryden thought himself at liberty to heighten and enlarge the descriptions of his great master. But in his versions from prose pieces, (in the tale of Theodore and Honoria, for example), he borrowed from Boccacio only the outline of the story: the language, the conduct, and the sentiment, were all his own, and all in the highest strain of poetry. In like manner, we cannot see why Mr Rose should have thought himself obliged to follow in any respect the prose of Herberay, while he himself was writing poetry. We can easily conceive that a prose romance may be converted into a metrical romance or epic poem; but we cannot allow, that there ought to subsist betwixt two works, the style of which is so very different, the relations of a translation and an original work. In consequence of Mr Rose's plan, it appears to us that his poem has suffered some injury. The necessity of following out minutely the prose narrative, occasions an occasional languor in the poem, for which simple, and even elegant versification does not atone. We will, however, frankly own, that the casual circumstance of having perused Mr Southey's prose work before the poem of Mr Rose, may have had some influence upon our criticism; since our curiosity being completely forestalled, we may have felt a diminished interest in the latter, from a cause not imputable to want of merit.

The avowed model upon which Mr Rose has framed his A-
madin, is the translation of Le Grand's *Fables*, by Mr Way; and it is but justice to state, that, in our opinion, he has fully attained what he proposed. An easy flow of verse, partaking more of the school of Dryden than of Pope, and chequered, occasionally, with ancient words and terms of chivalry, seems well calculated for the narration of romance and legendary tale. The following passage is a successful imitation of Chaucer:

• To tell, as meet, the costly feast's array,
 My tedious tale would hold a summer's day :
 I let to sing who mid the courtly throng
 Did most excel in dance or sprightly song ;
 Who first, who last, were seated on the dais ;
 Who carped of love and arms in courtliest phrase,
 What many minstrels harp, what bratchets lie
 The feet beneath, what hawks were placed on high. '

We do not pretend to say, that Mr Rose's poetry is altogether free from the common places of the time. Such lines occur as these :

• Nearer and nearer bursts the deafening crash,
 Athwart the lurid clouds red lightnings flash. '

But if Mr Rose's plan prevented him from aspiring to the higher flights of poetry, he never, on the other hand, disgusts the reader by sinking into bathos. We are persuaded that the public would be interested in a modern version of some of our best metrical romances by Mr Rose. We are the more certain of this, because we have read the notes to Amadis with very great satisfaction. We pay them a very great compliment, indeed, when we say, that they resemble, in lightness and elegance, though not in extent of information, those of George Ellis to Way's *Fabliaux*.

ART. XI. *Observations on Cural Hernia; to which is prefixed, a General Account of the Varieties of Hernia.* Illustrated by Engravings By Alexander Monro, Junior, M. D. F. R. S. E. and Professor of Anatomy and Surgery in the University of Edinburgh. 8vo. pp. 120. Longman & Rees. 1803.

IT is often difficult to judge with perfect impartiality of the work of one who comes recommended to us by so many extrinsic titles to respect. Our expectations are naturally influenced by the situation and opportunities of the author, and have an unfortunate tendency both to enhance his merits and to aggravate his defects. If the book correspond on the whole with the anticipations we have indulged, we give the author full credit for every incidental display of genius it may contain, and dwell with satisfaction on every enlightened sentiment and judicious remark. But if, on the other hand, the general strain of the performance be rather below what might have been expected from the state of the science, and the opportunities of the individual, we soon become unusually quick-sighted to all his imperfections; and can scarcely divest ourselves of a certain portion of irritation and dissatisfaction, that would

would not perhaps have been excited by an anonymous publication.

The work before us is the first production of the Professor in the highest branch of the medical department in the University of Edinburgh: and from an author in this situation, holding at his command all the resources of a great national museum, and almost the whole combined information of the country, and engaged to maintain not only his own reputation, but that of the school in which he teaches, it was certainly natural for us to expect a work, rich in observation and splendid in execution. If any of our readers should take up the book, as we did, with these impressions, they will probably soon come to comprehend the feelings of disappointment with which we proceeded in the perusal of it.

We willingly confess, however, that a little more consideration has convinced us of the folly of measuring this production by so lofty and gigantic a standard: it is but justice to recollect that it is the work of a young man, to whom every thing cannot be at once familiar, and who is laudably anxious to give some public and early proof of the industry by which he is to show himself worthy of the situation to which he has been elevated. We are persuaded, indeed, that it is by this meritorious solicitude alone, that the author has been induced to venture before the public with a treatise on so important and delicate a subject, and are therefore disposed to admit of every apology for the imperfections which it may be our duty to point out in it.

The work before us professes to treat particularly of Crural Hernia, and to set out with a systematic explanation of hernia in general. It made its first appearance, we understand, in the Royal Society of Edinburgh, and is now laid before the public, with all those corrections and improvements that may be supposed to have been suggested by the remarks of that learned Body. If we were inclined to give a short and specific character of the book, we should say that it consisted too much of a series of unconnected observations, and contained rather an ostentatious display of the author's acquaintance with rare and extraordinary cases, at the same time that they are scarcely ever detailed in such a manner as to communicate much instruction to the reader. It is chargeable also, in some degree, with a fault that is more common, and more baneful in books of medicine than works of any other description; we mean, that jealous partiality with which an author magnifies any little original remark or hint of a theory into a doctrine of disproportionate magnitude, and dwells upon it with a degree of complacency and copiousness, which he is often obliged to compensate, by retrenching some of the most important parts of the subject.

In a subject, however, of this great and terrible importance, where the lives of multitudes come so frequently to depend on the decision

decision and dexterity of the surgeon, we cannot content ourselves with these general observations, but must be allowed to go somewhat more minutely into the doctrines and observations of the author.

Passing over the few introductory sentences, we are somewhat abruptly arrested by this general definition:

' By the word Hernia, is generally understood, in the language of surgery, an *external tumor*, formed by a protrusion of the bowels through one or other of the openings through the abdominal *muscle*, where the umbilical, spermatic, or crural vessels pass out, or round ligament of the female uterus.'

This definition, we are afraid, will not be found to be very accurate. A hernia is *not* an external tumor; nor is it formed by the bowels protruded through one or other of the abdominal muscles. In many instances, it is not external; nor can it be said to form a tumor at all. It is produced by the pressure of the muscular *parietes* of the belly. The muscular fibre acquires great strength by action; and the protrusion, therefore, takes place betwixt some of the tendinous expansions: and often falling down betwixt the womb and rectum into the vagina; through the *obturator ligament*; betwixt the *sacro-ischiatric* ligaments, or through the central tendon of the diaphragm, the protruded part is strangulated. But there is something of more importance than even this palpable incorrectness of the definition. A hernia may take place under the crural arch; yet there may be an utter impossibility of deciding on the case by the *tactus eruditus*. There may be no *tumor*, while yet the hernia is of that kind in which the symptoms take a rapid course, and the patient is soon beyond the reach of assistance.

Dr Monro makes a division of hernia into acute and chronic. In the former (he observes) the disease comes on rapidly, and is the immediate result of violent muscular exertions: In many instances, he informs us, it creates a violent degree of pain, and soon proves fatal, from strangulation and inflammation of the bowels. In the latter, the bowels are gradually protruded, are easily returned, and remain down without strangulation: so that such hernia have even continued for life without great inconvenience.

This division of the subject is so far good; but it does not present a perfect or impressive account of the real distinctions of hernia. It does not mark the cause of this distinction, nor does it lead to the deductions which are truly useful in practice. A better distinction is, to mark where there has been predisposition, and an unusual laxity of the openings of the abdominal tendons; and where,

where, on the other hand, there has been little or no imperfection in the parts, but where the hernia has been produced by great violence and straining. If, for example, after a severe and long continued engagement at sea, a young, robust, and healthy lad, be suddenly bent down with extreme and enervating pain, and a small, firm, and unelastic tumour be felt in the groin; he is in the utmost danger, for the opening is small. The violent straining upon the rope, and at the same time an attempt to throw out the carriage of the gun with his foot, has brought down a small piece of the gut. In this case, the attempt at reduction without incision, will often fail; nay it will most probably aggravate the symptoms, and the inflammatory stage will quickly lead to gangrene. Suppose again that a groom, stout, healthy and active, leaps into his saddle with so sudden an exertion as to bring down a hernia; it has the same character, being small, hard, painful, and dangerous.

Opposed to these cases, is that of predisposition, where there has been no violence. A boy has had a tumour from his infancy; or the patient is a man advanced in life, of a fat and relaxed habit; he has felt a fullness in the groin, which has increased gradually, but subsides when he lies down at night; it makes a slow progress, and the symptoms are mild, and by no means alarming; and when, from the irregularity of his bowels, or other accidental circumstance, he requires the assistance of a surgeon, the hernia is easily reduced. These are the extreme cases; and by studying the cause, and attending to the degree of violence, the hardness or softness, and elasticity of the tumor, and the urgency of other general symptoms, the surgeon will in general be able to form a judgement of the propriety of reiterated efforts to reduce the hernia by the hand, or the danger of violence from this rough manuism, and the necessity of incision.

The danger to those who have long laboured under the inconvenience of a hernia, and who wear a truss, is, that by the compression which is necessary to support the parts, there is produced such a degree of callosity or rigidity of the surrounding cellular membrane, with thickening of the neck of the sac, that when, by some unusual exertions, the hernia descends either partially or entirely, the patient comes nearly into the situation of those in whom hernia has been produced without any predisposition to the disease, and in whom a small portion of intestine has descended into a narrow and contracted passage. When, on the other hand, the bowels are allowed to remain down, the tumor increases from day to day; and there is danger of strangulation, from the gradual thickening of the neck of the sac; from some strain, and consequent inflammation and swelling of the cellular membrane, or condensing and conglomeration of the omentum; from

from irregularity of the action of the intestine, included in the hernia; or from collections of indigestible matter within it.

The most important section of a treatise on hernia, must be that which relates to the sac; because all the speculative points, of chief consequence, are connected with this department of the subject; and it is here that the surgeon has to encounter the greatest difficulties in practice. But, instead of finding, in this treatise, a learned, comprehensive, and practical view of this subject, we meet with nothing but the wanderings of a mind led astray after curious and strange things, without any sober impression of what is truly useful and important. We learn, here, that the peritoneum forms the herniary sac; but we are not informed how unlike to the internal peritoneum the sac of a hernia becomes: We are not informed how it connects itself by adhesions; how it is obscured by the condensing of the cellular membrane, and the attachment of glands; how the ring and sac coalesce; and how difficult it often is to distinguish their limits. We find that our author has seen thick sacs and thin sacs, and sacs through which the vermicular motion of the intestines could be distinguished: he has seen also the transparent sac of an umbilical hernia! We can believe that he has seen much; but we should have been better pleased, if he had pointed out to us the results of his extensive observations, and either traced the analogies by which these varieties are connected in the general system of pathology, or indicated the advantage that practice is likely to receive from his slight notice of those rare and extraordinary cases.

We have been delighted with the display of morbid anatomy, which the museum of Mr J. Hunter affords; while we were chagrined and disappointed with the imperfections of the histories that are now to be obtained of these important cases; doubly important, from having been under the observation of such a man. We did not think, however, that Dr Monro would have had recourse to this collection, without pressing necessity; and we cannot help supposing that he has been rather unfortunate in his selection of a case. For, from the engraving with which we are here presented, and from the expression of Mr Hunter, in which he says, it is an example of the manner in which a hernia may be cured, or the mode in which *an old hernia* is formed, we should fear that our author has mistaken the case. There is no such thing as an old hernia, in the sense in which we speak of an old *anal-pit*; and we conceive, that an old herniary sac must have been meant. In this view, the plate is intelligible; for it is a sac inflamed and adhering, so as to present several compartments. We cannot vouch for the accuracy of this interpretation; but merely recommend a second examination of the preparation; for, to consider this case of Mr Hunter as a collection

of four herniary sacs thrown together; and communicating, seems to us a most unlikely supposition.

Connected with this subject of the herniary sac, we have here recalled to our notice the proposal of the elder Dr Monro, for reducing the hernia without opening the sac. Although this proposal be antiquated, yet this alone should not take from its importance. And as it comes from an authority which we so highly respect, we proceed to give our reasons for considering it as impracticable. In this operation it is proposed to open the skin and tendon only, without opening the sac. When a portion of the intestine is first protruded, the peritoneum, which is carried before it, has its natural character, being a thin and dilatable membrane; and the situation of the parts is such as an anatomist would make in the dead body, in order to demonstrate the relation of parts. Were the surgeon, then, to operate at the time of the rupture coming down, while yet the sac has not formed its adhesions, and the tendons of the muscles are evidently embracing and constricting the peritoneal sac, he might, after a neat dissection, succeed in reducing the portion of the gut; the sac either being pushed up with it, or being allowed to remain down. But, even in the case where the progress of the disease is rapid, and the danger great, we do not find the state of the parts to be such as will admit of the proposed operation.

When a hernia slips down, the tendon embraces the neck of the sac, and, with the surrounding cellular membrane, soon coalesces with it; while the sac, quickly losing its dilatability, becomes inflamed, thickened, and rigid. Although the tendon of the muscle may be the original cause of the strangulation; yet, in the latter stage, there would still remain, after its removal, a thick unelastic ring, formed by the neck of the sac. In hernias of some standing, what is called the ring (a term which is improperly applied to the splitting of the tendons in their natural state), is, in a still more particular manner, formed by the sac and common membrane, and less by the constriction of the tendons or ligament.

It must be recollectcd, that the gut has been down for some time without inconvenience: there has, however, arisen a cause of inflammation in the cellular membrane and peritoneal sac; the parts swell; but, of course, the tendons are stationary; they have suffered no degree of contraction; the strangulation arises from the change which has been produced in the neck of the sac, and the contents of the hernia. The tendons may still be considered as the cause, but will not now admit of relief; for the neck of the sac has been moulded to the compressed opening, and remains rigid and unyielding. On the other hand, in the common method

of operating, when the sac has been opened, and the intestine exposed, the neck of the sac being cut, it often happens that there is no occasion to cut the tendons; or, by touching it lightly with the knife, the point of the little finger gains all the dilatation which is necessary. We must add, that there is much doubt, whether this proposed operation should produce a radical cure. The necessary consequence of the common operation is, that there is a consolidation of all the parts; the tendon is but little injured, or cut up; the sac adheres, and its cavity is often obliterated. But, in consequence of its being opened by this operation of the elder Doctor Monro, the ligamentous guard is cut freely and widely open; and as there can therefore be no thickening and condensation of parts, of course the patient is left more exposed to a future hernia, than even when they are simply reduced by the hand, without incision at all.

The proportion of cases in which the omentum forms part of the hernia, is very great; and still more numerous are those, in which it is partly the cause of strangulation. When a surgeon reduces a hernia without incision, he feels, at the moment of the happy effort, the flatus croaking under his hand; the tumor diminishes; and the intestines soon after slip up with little assistance. Here, the contents of the protruded bowels having been returned into that part of the canal which is within the belly, the excited contractions of the gut assist in drawing it within the abdomen. But in the reduction of the omental hernia, we have no such assistance; we operate on an inert mass; and as this mass has a narrow neck, the difficulty of the return of the venous blood through the ring of the sac, produces a gorging, enlargement, and great deposition of fat in it; while, being compressed in narrow bounds, it adheres together, and forms a mass, bearing a great disproportion to that part which is included in the neck of the sac. It will readily be understood, that this accident forms another bar to this operation; for the sac must be opened, and the omentum spread out, before it can be reduced.

These objections which we have stated, do not seem to have occurred to Dr. Monro; and, indeed, those which he has mentioned are of a very subordinate order.—

They pretend indeed to assign as reasons for their practice, that unless the sac is laid open, we cannot know in what state the bowels are; that the intestines or omentum are liable to mortification; that collections of fetid water are apt to occur, which, on being pushed back into the abdomen, might be productive of mischief; that sometimes the cause of strangulation has been detected, either in the entrance to the sac, or among the bowels protruded; or they tell us there are adhesions

adhesions of the bowels to the inner side of the sac, which ought to be separated.

' But such kind of reasoning, if it has weight, goes farther than is intended; for it ought to prevent surgeons from attempting in any case, at least from attempting in most cases, the reduction of a hernia.

' Yet nothing is more common, than to see surgeons doing every thing in their power to reduce a hernia; and, in a few minutes or hours thereafter, instead of taking off the stricture by cutting the tendon, laying open the herniary sac, as if the reduction of the bowels would otherwise have been unsafe. Surely no reason can be given why the reduction of the bowels should be safe before the tendon is cut, but unsafe after it is cut.'

Now, this leads to useful explanation. When a surgeon is reducing a hernia by the hand, and by putting the patient into a variety of postures (viz. by the taxis), he knows that there is a certain degree of force which ought to be used; and the superiority of one surgeon over another consists chiefly in this, that a skilful man knows what exertion he can use with safety, and when it is adviseable to desist. If he goes beyond this allowable degree of force, he is guilty of great imprudence; he excites a rapid increase of inflammation, or actually ruptures the bowel. When, therefore, a surgeon, using his exertion with discrimination and skill, relieves his patient, he is assured that he has not gone the length of injuring the parts, and that the strangulation was not complete, or the disease far advanced; otherwise, his operation could not have been attended with so perfect an effect. He is therefore under no alarm; nor does he conceive the possibility of his having reduced the contents of a hernia, which has advanced so far towards mortification as to render it dangerous. The distinction, which the Doctor seems to have overlooked, is, that, after all attempts have failed, after a thorough conviction has arisen that the case is a confirmed strangulation, and the operation is determined on, there is a probability, that the disease may have verged to its termination in gangrene; so that the reduction ought not to be attempted without examination.

We recollect a case which will illustrate this, and, at the same time, be a caution to surgeons, and, above all, to the younger practitioners.

Certain surgeons, in a provincial hospital, were convoked in consultation upon the case of a poor man, who, after the usual train of symptoms, was sinking in the last stage of an incarcerated hernia. His breathing was weak, his pulse low, his belly tense, and he had incessant sickness. The surgeons, comprehending

hending the case, yet knowing how deceitful such symptoms sometimes are, examined and attempted the reduction, by such gentle means as they thought the high state of inflammation and tenderness of the parts would bear. An operation having been considered as absolutely necessary, the surgeons were assembled in the morning; when the house-clerk, with no small self-gratulation in his countenance, informed the surgeons that he had reduced the hernia without assistance, and that the man was completely relieved. The poor man was relieved; but it was by the harbinger of death: gangrene had taken place of pain and great suffering—the mortified intestine was indeed reduced.

But, in considering this question of the operation proposed by the elder Dr Monro, we must not forget our author, and that his intention was to write on CRURAL HERNIA. As introductory to this subject, we are favoured with an elaborate, but imperfect description of the crural arch. And here, among other matters of great importance, he has discovered that there are distinctions betwixt male and female. The Doctor then pays some compliments to Mr Gimbernat, which we really do not conceive to be merited, and proceeds to expatiate on the advantage of his plan of operation.

If there be any particular object more than the intention of writing implies here, it is to draw a parallel betwixt the operation of Mr Gimbernat and the common operation for crural hernia. We are sorry to find, however, that our author leaves us without the sanction of his authority for either manner of operating; his judgment is held in complete suspense, between the novelty of M. Gimbernat's operation, and the merits of that description, which he has himself given us of the common method. We shall therefore endeavour to throw out some hints to assist our readers in forming their judgement on this point.

The study of anatomy must certainly be the principal and fundamental branch of education of him who is to attempt the improvement of surgery—but it is not the whole; for, without having observed the parts in their diseased state (not in bottles), and often having watched the skilful surgeon in his operation, and having also practised with his own hands, most erroneous ideas may be entertained. Gimbernat's operation has evidently been suggested by speculation upon the view of parts in their natural state, and not from any observation of the difficulties which embarrasses the surgeon in his operation.

This gentleman, introducing his directory and bistoury on the side of the sac next the pubes (most awkwardly with both his hands), runs them inwards, so as to cut up the attachment of the

the *poupart* ligament to the os pubis. By this rude operation, there is danger of wounding arteries—there is great danger of wounding the intestine; which, being much distended, will, even in the common operation, get before the knife; and much more probably will this happen, when you have got under the protruded bowel, and are cutting with both hands. Those who have seen the operation for the femoral hernia, and have observed the depth of the neck of the sac, and the manner in which the bowel sometimes rises up, and conceals its strangulated part, may form a just conception of the danger of this deep lateral cut. Further, the great foundation, and the strength of the ligamentous connexion of all the lower parts of the belly, is done away by this operation; of course, it must leave the parts open to future hernia, in a greater degree, than when the operation is performed in the common and approved method.

In regard to the description we have of the operation, as commonly performed, we need only observe, that the author speaks of cutting the tendon, fibre after fibre, without entering the knife deep under the tendon; which is just our idea; but he afterwards alarms us ‘with a sweep, and extensive incision.’

In concluding, we may observe, that, through the whole treatise, the author shows a most depraved appetite for strange and uncommon cases, with an unaccountable reluctance to disclose the results of his investigation. Indeed, we are sometimes led to imagine that he requires some external excitement to divulge his secret knowledge; for he has a way of saying he knows of a case, which seems to imply that his intelligence and information are greater than he chooses to express. There is mention made of some facts, to which we should object, did our limits permit: yet we must, at all events, protest against the practice related in the case, p. 17. There are also, we conceive, several mistakes in pathology; which, however, we hope will have no very bad influence upon the practice of surgery. On the subject of the *diverticula ilii*, and the history of the subject of *anus* at the groin, he shows a want of reading and investigation, that surprised us; and, instead of speculating on the formation of these appendices, we should recommend to the author's perusal Morgagni, Ruysch, and Palfin, and the papers of M. Mery and M. Littré (*Acad. R. des Sciences*), where he will find both sufficient speculation, and well told cases.

With regard to the following subjects, he is exceedingly deficient:—umbilical hernia; congenital hernia; general symptoms; diagnosis and prognosis. Indeed, were it not for the glaring titles, we should sometimes have been at a loss to discover the subject of discussion; and yet this small performance is every

where ecked out with large extracts from the most common and familiar books.

Upon the whole, we are rather inclined to assign this author a few years of additional probation, before we pass any definitive judgment on his merits as an author, and to look upon his present defects as the consequence of inexperience, and a premature thirst for distinction. As he is necessarily secluded from the practice of surgery, we would advise him, if he continues to write on surgical operations, to converse with those who are most in the habit of performing them, and to enter into all their difficulties, and the occurrences and disappointments they meet with in the practice of their profession. After he has thus made himself master of the facts, let him labour to explain and do away their difficulties and prejudices, inform them of their errors, and relieve their minds of their perplexities and apprehensions. Above all, let him remember, that, in proportion to the rarity of a case, is the smallness of its importance in practice; and let him either cease to boast of his opportunities, or prove more satisfactorily to the world that he has known how to profit by them.

ART. XII. *Travels through the Southern Provinces of the Russian Empire, in the years 1793 and 1794.* Translated from the original German of Professor Pallas, Counsellor of State to the Emperor of Russia, Member of the principal Literary Societies of Europe, &c. &c.
Vol. II. 4to. Longman & Rees, London. 1803.

WHILE France and England were prosecuting voyages of discovery over the whole face of the globe, and examining the limits of many regions with a curiosity wholly unknown to those who inhabited them, the Empress Catherine indulged her magnificent spirit, by exploring the empire which she governed; and, without quitting its limits, brought to light as much knowledge, as other princes who sent round the earth to collect it.

To us, whom a few days may convey with ease and security, from one end of our territory to the other, it is a sublime novelty to hear of learned men being absent for years on their travels through the dominions of their Sovereign; ranging from civilized to barbarous, and from barbarous to polished men; and emerging from frost and snow into the fine regions of the sun, under the protection of the same name, and the authority of the same laws.

The principal persons selected by the Academy of Petersburgh for these important excursions were, Mess^s. Lepechin, Guldenstadt, Gmelin, and Pallas.

Gmelin began his travels in 1768 or 1769. His journey was through Moscow and Paulousk to Azof. From this place he passed through Tzaritzin to Astracan; travelled through the north of Persia; returned to Entzili on the south shore of the Caspian; and from thence to Astracan in 1772. He was seized on his return, when only four days journey from the Russian dominions, by Usmei Khan, a Tartar prince; and expired in prison at Achmet Kent, in Mount Caucasus.

Guldzenstedt, in the year 1769, passed through Tzaritzin and Astracan to the confines of Persia, near the western shore of the Caspian; examined various countries in the eastern extremity of Caucasus; and reached Osetia in the most elevated part of that range of hills. He proceeded to North Caucasus, Cabarda, and Georgia: from thence he passed into Tmeretia, the middle chain of Mount Caucasus, the confines of Mingrelia, Middle Georgia, Eastern and Lower Tmeretia, and from thence returned to Killar. In the spring of 1773, he set out for Mosdok, and then went upwards to the Malka; thence to the mountains of Beschtan, from which he took the route of Tschekash. From this town he made a tour to Azof, crossed the Kalmius, following at the same time the Berda and the new lines of the Dnieper, till he arrived at Krementschuk, the capital of New Russia, where he was recalled.

Lepechin proceeded to the government of Nishney-Novgorod, to Simbris in the province of Kazan, surveyed the course of the river Tscheremshan, and travelled over much of the district of Orenburg. From Astracan he crossed the mountains which separate the rivers Volga and Yaik, and wintered in the Ural of Orenburg on the river Brelaya. In the month of May following, he pursued the course of the Brelaya, came to Ekaterinenburg, advanced into the Ural, and passed the winter at Tobolsk. In 1771, he visited the province of Vratka, and embarked at Archangel to visit the coasts of the White Sea. After wintering at Archangel, he pursued the same object, in the ensuing summer, as far as the western and northern coasts; and proceeding to the mouth of the White Sea, returned by the Gulf of Mezen to Petersburgh. During the summer of 1773, he surveyed various parts of the governments of Pscov and Mohilef; proceeded along the Duna to the Riga, and soon after terminated his travels at Petersburgh.

Professor Pallas was absent from Petersburgh six years. In 1768, he passed through Moscow and Musom to Casan. After his examination of this province, he passed the winter at Simbris. In 1769, he penetrated to the mouth of the river Yaic, where he examined the confines of Calmuc Tartary, and the

neighbouring shores of the Caspian. After returning through Orenburgh, he passed the winter at Ufa; which he quitted the following summer, and pursued his journey through the Uralian mountains to Tobolsk. The next year, he traced the course of the Irtish, after examining the Altai mountains; and remained that winter at Krasnoyarsk, a little town on the Yenisei. From Krasnoyarsk he crossed the lake Baikal to Kiatka. Having penetrated into Dania, he went on between the rivers Ingoda and Argoon: thence, tracing the lines which divide Russia from the Chinese Mongol Hordes, he returned again to Krasnoyarsk. In the summer of 1773, he visited Tara, Yaitzk, and Astracan, concluding that year's route at Tzaritzin on the Wolga; from whence he arrived at Petersburg the ensuing spring 1774.*

The travels, of the latter part of which we are now to give an account, were undertaken in the years 1793 and 1794, by the special permission of her Imperial Majesty, for the recovery of the Professor's health. With this publication, M. Pallas proposes to take leave of the literary world, and expresses, in a very feeling and affecting manner, those warnings of age which have admonished him that he is on the eve of bidding adieu to much more important relations. The first volume of this work contains an account of M. Pallas's journey from St Petersburg to Tzaritzin; remarks made in various excursions on the southern banks of the Volga; a journey in the spring of the year to Astracan; another from Astracan to the lines of Caucasus; observations made during a journey along the Caucasus; an account of the nations inhabiting Mount Caucasus; journey from Gengiesk to Tsherkasf and Taganrof, and from Taganrof to the Taurida:—to the description of which latter country, the volume now before us is exclusively confined.

The population of the Crimea formerly amounted to at least half a million. Its first diminution took place in 1778; when, in consequence of the peace concluded with the Turks, 30,000 Christians, comprehending many artisans and manufacturers, were removed to the country between the Don and the Berda, beyond the sea of Azof. Soon after the Crimea fell under the dominion of Russia, and between the years 1785 and 1788, many thousand Tartars sold their property at the lowest prices, and withdrew to Anatolia and Romelia; whither the surviving individuals of the family of Ghirei, and many nobles, also retired; not to mention those who were killed in the troubles, or afterwards destroyed by the plague: So that, according to Professor Pallas, the population of the Crimea is not at present more than 200,000 persons of all nations and conditions.

The

* This tour was published in five volumes 4to. by M. Pallas.

The Tartar inhabitants of the Crimea may be divided into three classes. The Nagays, or unmixed descendants of the Mongolian tribes, who formed the bulk of the army of Tshingis Khan, which invaded Russia and the Crimea. These Tartars differ materially from the wandering Nagays, near the lines of Caucasus and the Akhtouba, who speak a language less corrupted by the Turkish dialect, possess more activity and vivacity, a greater disposition to plunder and rebellion—in short, exhibit a purer specimen of the genuine Tartar savage, than their brothers of the Taurida, who are emerging from the pastoral to the agricultural state, and unfolding the first germs of civilization.

The second class is the Tartars who inhabit the heaths, or Steppes, as far as the mountains; and who, in the district of Perekop, still retain some traces of the Mongolian countenance. They devote themselves to the rearing of cattle to a greater extent than the mountaineers, but at the same time are husbandmen.

The third class is composed of the inhabitants of the southern vallies bounded by the mountains; a mixed race, which has originated from the remnants of various nations, crowded together in these regions at the conquest of the Crimea by the armies of the Mongolian leaders. They display a very singular countenance, and are considered by the other Tartars to possess so little of the true Tartar blood, that they call them, in derision, *Mur Tat*, which signifies renegado. They are not unskilful in gardening and vine-dressing; but are, upon the whole, unworthy inhabitants of the delicious regions they possess. They are so disaffected to the Russian government, that they are always the first to rise in rebellion against it; and in the last Turkish war, were all ordered to the distance of ten versts from the coast, in order to obviate the danger of their becoming spies and traitors. Professor Pallas thinks it would be for the general good, to remove them entirely from these vallies into the interior of the country, and to people their lands with more industrious settlers. These short and violent abridgements of the progress of amelioration, seldom, however, answer the expectations which they excite: it is like transfusing blood, instead of strengthening the system, and disposing it to the proceſs of sanguification.

The Tauridan Tartars, in their love of splendour, in the exclusion of their women from society, and in the unnatural practices which prevail among the other sex, evince some of the most striking features of Oriental nations.

The nobility and the priesthood are highly respected among them; and in former times, frequently made considerable resistance to the power of the Khan, who was always chosen from the family of Ghireis; which family Professor Pallas, in opposition,

tion to the common notions on that subject, will hardly admit to have been direct descendants of Tshingis Khan.

The religious ceremonies, nuptial solemnities, and other customs of the Tartars, agree in every respect with those of the Turks, which have been so often described by travellers. The practice, however, of polygamy, which we should have supposed more likely to have been adopted than any other, has never obtained among them. Male and female slaves are not common in the Taurida; but the nobility support great numbers of idle retainers, who accompany them when they make their entry into the towns, and swell the pomp of their retinue.

Europe, compared with the despotic governments of the East, enjoys a great liberty of thinking, acting, and writing. There, the activity of the human mind, long since thoroughly roused, is going on and increasing in velocity. Industry is become a passion; and even pleasure mimics labour in her amusements and relaxations. Tartars and Turks, like all other savages who are not compelled to toil for their daily support, find their minds and bodies to be mere lumber, and are ignorant how to dispose either of the one or the other. A Tartar will sit for whole hours on the same spot, with his countenance turned in one direction, and with a pipe in his mouth which he has not even energy enough to smoke. Hunting alone rouses a Tartar noble from his sloth; and he gets up to pursue animals that seem (if the question is to be determined by dignity of nature) to have almost an equal right to pursue him.

In the vocabulary given by Professor Pallas, the number of words adopted into the Tartar language from the Genoese, is very remarkable; a still greater number of Greek words has found its way into the same language: But the Professor will not allow, in conformity with the opinion of Busbek, that any vestige of the Gothic is perceptible in the different Tartar dialects. However savage the Tartars of the Crimea may be in other particulars, in the science of eating they rise above themselves. They have so far relinquished their antient food of horse-flesh, that they will only feed upon colts; and to this diet is added forced-meat balls wrapt in green vine or sorrel leaves; various fruits filled with mince-meat, stuffed cucumbers, and a great variety of learned dainties, which Mrs Glasse herself would not disdain to add to her high-flavoured catalogue.

The peninsula of the Crimea, is the only region of the Russian empire in which almost all the products of Italy and Greece might be reared with success, and in which many of those products grow spontaneously. Wine, silk, sesame, olive, cotton, a great variety of dyeing drugs, which are at present imported from

from the Baltic and the Caspian at a great expence, might be encouraged either in this peninsula or on the banks of the Kuma, and Terek; and by some obvious improvements in the present breed of sheep, woollen manufactures might be pushed in the Crimea to a great extent. The impediments to the prosperity of the Crimea are, the slothful and savage character of its Tartar inhabitants,—their disaffection to a Christian government,—the deficiency even of such bad population as the Tartars might afford,—the injudicious conduct of the Russian government in making the grants of the Crown lands the instrument of court favour and intrigue, rather than the incitements to industry, and increase of numbers ;—to which causes is to be added, the great insecurity of landed property, from the inaccurate specifications of the Crown grants, and the tricks and chicanery to which that inaccuracy has given birth.

The seasons in the Crimea are very irregular. In 1795-6, in the beginning of February, all the spring flowers were everywhere seen in full bloom, though during the remainder of the month they were buried under a deep snow. The severe winters of 1798-9 and of 1799-1800, continued from the end of October till April, with various degrees of cold, accompanied by dreadful hurricanes, such as to sink the thermometer 13° below the freezing point. During the last of these winters, the Sea of Azof, the Bosphorus, great part of the bay of Kaffa, and several creeks of the Euxine, were completely frozen over. The winds are very variable, bringing from the four cardinal points the same species of temperature as with us. The climate, however, is so unsettled, that the barometer often varies six or eight times in 24 hours *. The summers are not less inconstant than the winters. The most salubrious of all seasons in the Crimea is the spring, which generally continues from March till the end of May. At that season, every thing in the vegetable world which is grateful in smell, or beautiful in colour, lends its aid to gratify the senses. The weather then is generally settled and serene, the heat moderate and refreshing: numerous flocks of sheep are seen moving in every direction, at the same time that village flocks are scattered over the pastures. Amid such peace, and freshness, and tranquillity, mere existence is a pleasure; and the mind loathes those studied enjoyments which it re-

* The Professor would perhaps consider this uncertainty of the climate as capable of being remedied, by an increase of cultivation and population. He firmly believes, that the temperature of a country is materially altered by the number of fires which are lighted in it. This appears to us to be rather too fine a speculation.

sorts to at other periods for amusement and support. The most unhealthy season in the Crimea, is the autumn; at which time, bilious fevers, remittent, or intermittent, prevail to a great extent *. With the exception of these fevers, this country might be considered as one of the most healthy in the world.

The frequent failure of crops would (but for the careless style of cultivation) be a fact totally unintelligible in a country, which paid such ample tributes, and sent such magnificent gifts of grain at the earliest period in which we are acquainted with its history †. The Crimea has erroneously been considered as the granary of Constantinople; an opinion which must in a great measure be attributed to the constant importation of corn from Little Russia by carriers who take salt in exchange for such commodity. If the native wines of the Crimea were encouraged by the imposition of protecting duties on foreign wines, all the interior governments of the Russian empire might, in the opinion of the Professor, be supplied from that province; and the sum of one million and a half of rubles, now paid for foreign wines, be deducted from an unfavourable balance of trade. The growth of silk has been but faintly attempted in the Taurida, though Professor Pallas thinks it is not only capable of that product, but of the growth of sugar also. In this latter opinion, however, Professor Pallas appears to us a little too sanguine; it is very inconsistent with all he has previously said of the instability of the climate. The assertion may be true partially, as we say grapes will grow in England, or apples in Scotland—courteously inferring, that what is true of a few select and sunny spots, is true of the whole climate.

By the emigration of the Greeks and Armenians, industry, which had not been very remarkable in Crim-Tartary, under the government of the Khans, was almost extinguished; and though this country has been subject to the dominion of Russia above fifteen years, there is a deficiency of the most necessary artisans, as well as of manufactures. Among the latter, that of Morocco leather is the most important; of which the red and yellow skins are in no respect inferior to those of Turkey. The cutlery of the Taurida is much esteemed for its excellent temper. Since the year 1795, some Greeks have employed themselves in burning soda.

* The Professor wishes to lay the prevalence of the Itch upon the climate; but this disorder, we have some reason to think, is by no means confined to hot climates.

† Professor Pallas advances occasionally some very singular opinions; he speaks of the earth being manured in the Crimea by snails crawling upon it. We would not rashly deny any thing advanced by so great a naturalist; we only beg leave very humbly to doubt.

soda. To these articles of exportation are to be added butter, salt, wheat, hides, and some coarse linen. The principal imports are raw and manufactured cotton, silk stuffs of various patterns, the wines of the Archipelago, brandy, dried fruits, and leaf tobacco. The value of exportations amounts to from 400,000 to 500,000 rubles. The importations fall short of that sum by 100,000 rubles; and the balance is principally paid in the base Turkish silver coin which is extensively circulated within the Peninsula. The foreign bankers, indeed, are eager enough to avail themselves of the high estimation in which the Tartars hold a genuine Mahometan coin; so that, even after its value had been raised *2*2 per cent.** under the present Sultan, it still maintained its superiority over the Russian silver money, the intrinsic value of which exceeded that of Turkey in the above mentioned proportion.

Such is the general account which Professor Pallas has given us of this celebrated country; which, though now of small importance, except as a military station, may hereafter become one of the richest appanages of the Russian empire. It is poor and distressed at present; because it has not yet recovered the sudden and violent change from a Mahometan to a Christian government, one of the most striking and complete vicissitudes which it is possible for any country to experience; a vicissitude which has banished the greater part of the inhabitants of the Taurida, and rendered those which remain, incorrigibly disaffected to the Russian government. What the progress of its prosperity may be, when the remembrances of this revolution are softened away, must depend, of course, upon the wisdom and liberality of that policy which the Russian government adopts in the management of its colonies. It must be notoriously deficient in both these points, if it can prevent that aggrandizement which Nature has done so much to produce.

We are under the necessity of saying little of the merits of Professor Pallas; because no writer of travels is better known to, or received by the public. With his talents as a naturalist, every body is well acquainted: he is extremely accurate; and yet, though we are persuaded that he tells nothing but the truth, it is probable that his official situation under the government has prevented him from telling the whole truth. These scientific envoys must have known, as well as if they had read it in their instructions, that they were to bring back no discoveries unpleasant to Imperial ears. We rather pity than blame them; and are convinced, in the instance of Professor Pallas, that he has struggled hard to be as dutifully tame as he ought; and that he has a spirit abhorrent of injustice and political abuses. A certain

certain taintness in style, and prolixity in topographical relation, appear to sit upon him a little more naturally. Through some chapters of his book, not much more is to be learnt, than that he went up a hill in this place, and down it in that; that the first part of the road is woody, and the second is not woody. Here there is a large pond, and there a small pond; and, in a third place, no pond at all. The most valuable topics are all discussed in a few separate chapters; so that the plums and sweet-meats are all crowded into a small space, and the larger portion left insipidly plain. Pallas, however, is not of that description of travellers, who profess to amuse by anecdotes about waiters and chambermaids: his object is to make the world minutely and thoroughly acquainted with the country which he is sent to explore. If he is dry, he is perspicuous and accurate; if he is un-amusing, he is authentic: and, long after many witty pamphlets, called books of travels, have perished, the works of Pallas will be studied as genuine and valuable descriptions of the countries through which he has passed.

Art. XLII. An Historical View of the English Government, from the Settlement of the Saxons in Britain, to the Revolution in 1688. To which are subjoined, some Dissertations connected with the History of the Government, from the Revolution to the present time. By John Millar Esq. Professor of Law in the University of Glasgow. Four Volumes 8vo. London. Mawman. 1803.

This is a posthumous publication, and does not complete the plan that was announced by the author in his lifetime. According to that plan, the history of the English government was to have been brought down, in the concluding part, from the Revolution to the present times. The manuscript of this portion of the work, however, we are informed by the present editor, was not left in such a finished and correct state as to be laid entire before the public. The Historical View, therefore, is only brought down to the Revolution in 1688; and a selection from the materials for the subsequent period is given in the form of separate dissertations. The two first volumes contain that portion of the work which was formerly published in 1786, including the history of the government previous to the accession of the house of Stuart; and the two latter the history and dissertations that belong to the subsequent period.

The reputation of Professor Millar, we are inclined to think, stands somewhat higher with his pupils, and those who had the benefit of his acquaintance, than it is likely to do with those who may merely peruse his publications. The constant acuteness and vigour

vigour of his understanding, the clearness and familiarity of his illustrations, and the great variety of his arguments and topics of discussion, together with something unusually animated and impressive in his tones and expressions, gave an interest and a spirit to his living language, that can scarcely be traced in his writings. All that vivacity and facility of statement, all that dexterity of reply, and power of picturesque illustration, that delighted in conversation, and fascinated in his lectures, appear to have evaporated as soon as he took the pen into his hand. In his style and manner of speaking, there was something very characteristic and peculiar. The composition of his writings is of a very ordinary description. He writes indeed with great clearness and solidity; and is never for a moment either trifling, loquacious, or absurd; but he is not often very captivating in his manner, and makes us feel the weight of his matter rather too sensibly in his style: it is a style, in short, that is somewhat heavy, cold, and inelegant; and his works, though abounding in good sense and forcible expression, are apt to fatigue the reader, from the want of that variety and relief, of which his spoken language afforded so eminent an example.

The style of conversation, indeed, in which most of his lectures were delivered, is not very easily adapted to the purposes of publication. The great merit, and the great charm of this style consist in its varying and judicious adaptation to the taste and situation of the hearers, and in the facility and animation with which every thing is communicated and explained. In addressing the public and posterity, however, no adaptation of this kind can take place: a greater reserve must be assumed: our positions must be fortified with greater care, and our conclusions enforced with more authority. In the deliberation and anxiety that necessarily accompany these operations, the spirit of our first conceptions, and the colouring of our original language, are apt to fly off: We are afraid to commit our dignity among strangers, by the use of a familiar or a ludicrous expression: We put our ideas into a dress of ceremony, and feel the oppression and constraint of it the more, for having been accustomed to the ease and the lightness of a less cumbrous drapery.

But though, for these, and for other reasons, the written style of Mr Millar be certainly inferior in force and effect to his conversation, the character of his genius is very clearly imprinted upon both: and though it must go down to posterity with some disadvantage from his contempt or unskillfulness in the art of composition, his writings will long continue, we have no doubt, to command the respect and admiration of his readers.

The distinguishing feature of Mr Millar's intellect was, the great clearness and accuracy of his apprehension, and the singular facility

gacity with which he seized upon the true statement of a question, and disentangled the point in dispute from the mass of sophisticated argument in which it was frequently involved. His great delight was to simplify an intricate question, and to reduce a perplexed and elaborate system of argument to a few plain problems of common sense. Though an expert dialectician himself, and ready enough to acknowledge the merit of any ingenious paradox that he had occasion to expose, he had but little indulgence for those more diffuse and imposing pieces of false reasoning that rest on the prejudices of mankind, or are produced by the weakness and wavering of the author's own understanding. As there was no man, indeed, that ever made less parade of his own intellectual achievements, there have been few less disposed to tolerate the learned vanity of others. To form a sound judgment upon all points of substantial importance, appeared to him to require little more than the free and independent use of that vulgar sense on which no man is entitled to value himself; and he was apt to look with sufficient contempt upon the elaborate and ingenious errors into which philosophers are so liable to reason themselves. To bring down the dignity of such false science, and to expose the emptiness of ostentatious and pedantic reasoners, was therefore one of his favourite employments. He had, indeed, no prejudices of veneration in his nature; and was apt to regard those minute inquiries in which many great scholars have consumed their days, as a species of most unprofitable trifling. Mere learning did not appear to him to deserve any extraordinary respect; and his veneration was reserved for those who had either made discoveries of practical utility, or combined into a system the scattered truths of speculation.

To some of our readers, perhaps, it may afford a clearer conception of his intellectual character, to say, that it corresponded pretty nearly with the abstract idea that the learned of England entertain of a *Scotch philosopher*; a personage, that is, with little or no deference to the authority of great names, and not very apt to be startled at conclusions that seem to run counter to received opinions or existing institutions; acute, sagacious, and systematical; irreverent towards classical literature; rather indefatigable in argument, than patient in investigation; vigilant in the observation of facts, but not so strong in their number, as skilful in their application.

There is one attribute of a philosopher, however, which Mr Millar must have been allowed in all countries to possess in great perfection. He wondered at nothing; and has done more to repress the ignorant admiration of others than most of his contemporaries,

poraries. It was the leading principle, indeed, of all his speculations on law, morality, government, language, the arts, sciences, and manners—that there was nothing produced by arbitrary or accidental causes; that no great change, institution, custom, or occurrence, could be ascribed to the character or exertions of an individual, to the temperament or disposition of a nation, to occasional policy, or peculiar wisdom or folly: every thing, on the contrary, he held, arose spontaneously from the situation of the society, and was suggested or imposed irresistibly by the opportunities or necessities of their condition. Instead of gazing, therefore, with stupid amazement, on the singular and diversified appearances of human manners and institutions, Mr Millar taught his pupils to refer them all to one simple principle, and to consider them as necessary links in the great chain which connects civilized with barbarous society. By the use of this master principle, he reconciled many of the paradoxes of history and tradition, explained much of what appeared to be unaccountable, and connected events and circumstances that seemed to be incapable of combination. While the antiquary pored with childish curiosity over the confused and fantastic ruins that cover the scenes of early story, he produced the plan and elevation of the original fabric, and enabled us to trace the connexions of the scattered fragments, and to determine the primitive form and denomination of all the disfigured masses that lay before us.

But though it is impossible not to be delighted with the ingenuity and happiness of the combinations by which these explanations are made out, and though it would be absurd, after what has been done, to call in question the soundness of the philosophy in which the principle is founded; it must not be forgotten, that Mr Millar's confidence in its infallibility was greater than could always be justified. As his object was to obtain great clearness and simplicity in his theory, he was apt, when satisfied, upon the whole, of its truth, to pass somewhat hastily over all that could not be easily reconciled to it. His greatest admirers must admit, that he has sometimes cut the knot which he could not untie, and disregarded difficulties which he was not prepared to overcome; that he has asserted, where he ought to have proved; advanced a conjecture for a certainty; and given the signal of triumph, when the victory might be considered as doubtful.

As his habits and dispositions led him chiefly to the exertion of his intellectual and argumentative faculties, he had made no great proficiency in the finer or more elegant departments of literature. His imagination, though extremely active and vigorous in the coinage of illustrations and topics of persuasion, was not very easily excited by the more exquisite and delicate beauties of

of composition. He had no great relish, we believe, for the finer kinds of poetry; and was apt to treat the extravagances and refinements with which some critics are so much enchanted, with a degree of ridicule which these qualities are not in general well calculated to endure. Of the more substantial merits of composition, however, he was an acute and able judge; and carried into the walks of literature the same powerful and sagacious judgment that availed him so much in the higher regions of philosophy: All the remarks which he has made upon these subjects are sound and ingenious; and though they do not indicate, perhaps, a mind of very nice sensibility, afford satisfactory evidence of the variety, as well as the solidity of his talents. Upon the subject of language, in particular, he had made many profound and original observations; though we do not know that he left any thing written upon the subject in a fit condition for being laid before the public.

In his politics, Mr Millar was a decided whig, and did not perhaps bear any great antipathy to the name of a republican: yet there never was any mind, perhaps, less accessible to the illusions of that sentimental and ridiculous philanthropy which has led so many to the adoption of popular principles. He took a very cool and practical view of the condition of society; and neither wept over the imaginary miseries of the lower orders, nor shuddered at the imputed vices of the higher. He laughed at the dreams of perfectibility, and looked with profound contempt upon all those puerile schemes of equality that threatened to subvert the distinctions of property, or to degrade the natural aristocracy of virtues and of talents. At the same time, he was certainly jealous, to an excess, of the encroachments of the regal power; and fancied that, in this country, the liberty of the subject was exposed to perpetual danger, from that patronising influence which seemed likely to increase with the riches and importance of the nation. Although he had no vulgar or jacobinical antipathies against the power of a monarch, or the privileges of nobility, he thought that the popular part of our constitution was most exposed to danger from the general diffusion of luxury, the increase of the public revenue, and the enlargement of all our establishments. Upon this principle, he has commonly taken part with the opposition party in all the measures by which they have attempted, for these two hundred years, to limit the prerogative or the influence of the Crown, and to take the controul of public measures more and more out of the hands of the executive. While no man could be more convinced of the incapacity and worthlessness of the clamorous multitude, he thought that the indirect influence of popular opinion was the only

only safeguard of our liberties ; and though sincerely attached to the limited form of monarchy established at the Revolution, he seems to have thought that the monarchy itself was the least valuable part of the system, and that most of its advantages might have been secured under another system of administration.

Although he was not always very cool or very moderate in his personal disputation, there is one peculiarity in his political writings that deserves to be mentioned. He not only conducts himself throughout with great calmness and deliberation, but passes from matters of ordinary discussion to the most controversial points of his subject, without appearing to be conscious of the transition. It is common, as every one must have observed, for a writer, when he approaches to a matter of controversy, or is about to advance an opinion which he knows will meet with opposition, to prepare himself for the contest in one way or another, and to give warning of being conscious that he is going to put off the character of a judge, or impartial spectator, for that of a zealous and determined advocate. An ordinary writer never fails to give signs of trepidation as soon as he enters upon the *debateable ground*, and seems in general so full either of fear or of indignation, that he can seldom settle into his ordinary spirits for some time after he has quitted it. Mr Millar, however, whose intrepidity of character exempted him from any feeling of alarm, does no such thing: He passes from the general speculations of philosophy to the peculiar doctrines of his party, without altering his manner, or seeming to expect a different reception ; and delivers the most questionable of his opinions with the same coolness and confidence that distinguishes his statement of the most obvious and indisputable truths. In this way, he avoids the violence and exaggeration that is apt to be engendered in the management of an avowed controversy ; and maintains a certain dignity of discussion, that is lost either by bristling suddenly up to repel an antagonist, or by trying to mollify him with elaborate and ineffectual apologies. The only disadvantage of the practice is, that it is apt to seduce the unwary into the adoption of those contested doctrines, which are thus involved and connected with unquestionable truths, and which they are not directed by any mark to consider as suspicious. For those who have been accustomed to think upon these subjects, this danger, indeed, can scarcely be said to exist ; but it should be remembered, that Mr Millar's books contain the substance of the instruction which he communicated to his pupils, and that it was from them they probably derived their earliest impressions upon subjects of a political nature.

Although the greater part of these characteristic qualities are to be found in the work before us, and though the statement of them

them may therefore be allowed to form no improper introduction to an account of that publication, we should scarcely have indulged ourselves in so full a description of them, if it had not been to supply a defect that occurred to us, on first taking up the volumes in question. Though this work is now published by Mr Millar's representatives at a considerable interval after his death, it contains no biographical account of the author, nor any attempt to delineate the general character of his genius or publications. To the greater part of writers, it would certainly be doing no sort of injury to withhold from the public every thing but what they had themselves laid before it: but wherever the living character is really superior to the writings that remain to illustrate it, we cannot help feeling it as a sort of duty to erect some memorial, however frail, to its merits; and to endeavour, at least, to supply some of the deficiencies that may be found in that picture of himself, which every author exhibits in his works.—We now proceed to make a few observations on the volumes before us.

It is only the latter half of this publication, as we have already remarked, that is new; but, in order to judge of its execution, we must state very shortly the scheme and order of the whole work. It was Mr Millar's design to exhibit an historical view of the English government from the earliest periods of its independent existence, down to the present times. This subject he has divided into three parts. The first, comprehends the history of the form of government that prevailed, from the establishment of the Saxons, down to the time of the Norman conquest. During this period, the scattered tribes and families of barbarians seem to have gradually arranged themselves under the protection of a few great leaders; and the government came gradually to be administered by a great *feudal aristocracy*. The second period extends from the conquest to the accession of the house of Stuart, and is distinguished by the struggles that took place between the Nobles and the Sovereign, and the gradual predominancy of the latter, in consequence of the divisions that took place among the aristocracy, and the authority that was acquired by a common leader, after the nation began to engage in more extensive enterprises. In this period, therefore, Mr Millar considers the government to have attained the condition of a *feudal monarchy*. About the period of the accession of James the First, a still more important change had begun to take place in the constitution of society; the introduction of arts and manufactures had made the internal aspect of the country pacific, and had not only engaged the retainers of the great lands in new employments, but had appropriated to other purposes the revenues from which they were originally maintained.

At the beginning of the third period, therefore, the lower orders had risen into consequence, while the increasing expence of the government rendered it more necessary that they should contribute to the support of it. This gave rise to a series of eventful struggles between the Commons and the Prerogative, which fortunately terminated in what Mr Millar has called the *commercial government*. This third form was established by the revolution in 1688; and, by the subsequent increase of expence and of public revenue, has contributed to enlarge the influence of the Crown upon one hand, while it has promoted the cause of freedom on the other, by the general increase of riches and knowledge, and the gradual diffusion of political information among the people.

Of this plan, we have already specified how much Mr Millar published in his lifetime, and how much was left unexecuted at his death. In estimating the merit of the part that is now given to the public, it is most natural to compare it with that which went before: and here we cannot help thinking, that there is a manifest superiority on the side of the first publication. It is not natural, we will allow, to expect that researches into the dark and barbarous æras which were treated of in that performance, should excite an equal interest, or afford the same scope for discussion, with those inquiries that belong to a period with which we are so much more nearly connected; and, *a priori*, it certainly could not have been presumed, that our attention should have been more powerfully attracted to the institutions of the Saxons, than to the errors and misfortunes of the Stuarts. Perhaps there is something in the very barrenness and unpromising aspect of the former speculations, that leads us to relish more highly whatever can be said with ingenuity or probability on the subject; while the notoriety of the later occurrences, and the facility with which accurate information may be obtained with regard to these, leaves but little scope for discovery, and circumscribes the limits of discussion. The chief cause, however, of this unexpected difference will be found, we believe, in the nature of Mr Millar's plan, and the peculiarity of the talents which he has devoted to its execution. It was his view to illustrate what was obscure or uncertain in the history of the English government. In the remote periods with which he was occupied in the former part of the work, he found obscurity and uncertainty enough; and the greater part of the lights he struck out, were kindled in the midst of utter darkness. In the subsequent part of his task, however, the facts were pretty well ascertained; and all that remained to be determined, was the merit or demerit of the actors. Instead of an historical inquiry, therefore, we are engaged in a political discussion, and taken away from the pleasant explanation of extraordinary occurrences, to listen to the controversial wranglings of party politicians.

But when we recollect that Mr Millar's chief excellence lay in tracing the connexion of those steps by which men advance from a barbarous to a civilized state of society, and in pointing out the circumstances that originally suggested or compelled the adoption of particular institutions, we shall see still more clearly, how it has come to pass, that he appears with the greatest advantage in discussing the early periods of our history. At the establishment of the Saxons in England, they were very nearly in the condition that is common to all barbarous communities, and their history might safely be taken as an example of what would generally happen in that state of society. The speculations that arise from the consideration of their proceedings, are connected, therefore, with a very wide and interesting field of discussion. They include, in reality, the general history of the species, and are susceptible of illustration from a great variety of remote and unexpected sources. The combination of these analogous views, and the elucidation that results from the comparison of unconnected truths, affords as captivating a display of ingenuity, and as pleasing an exercise to the understanding, as is to be met with, perhaps, in the whole range of human speculation. When we draw to the end of that progress, however, the interest of the inquiry is diminished along with its difficulty; and the genius that had succeeded in explaining obscure usages, may fail to tie down our attention to the adjustment of familiar disputes. There is something less magnificent, and more perplexing, in these modern discussions; and the talents that astonished us with the first rude sketch of the edifice, may not always be able to engage us with the merits of the finer finishing.

In endeavouring, indeed, to recollect the impressions that remain on the mind from perusing the first part of this performance, we will find that we have been delighted chiefly with the general dissertations that it contains; and that it is not the history of Alfred or Edward that enchanted us, but the history of human society. The speculations on the origin of the feudal system of property; on the institutions of tithings, hundreds and boroughs; on the nature of the national council, and on the original functions, and gradual elevation, of the great officers of the Crown—apply to all the European communities, and are even illustrated by references to the usage of remoter nations. In the portion of the work that is now before us, the interest is much less extensive; and the talents that are required for the execution of it, are quite of a different nature. The events that took place after the accession of the house of Stuart, are, fortunately for us, of a nature altogether different from those that are to be found in the annals of any neighbouring nation. The principles that are to guide us in our judgement

judgement of them, can no longer be sought for in the common philosophy of human nature, but must be gathered from a particular consideration of the circumstances of this country. The events are no doubt sufficiently interesting; but their causes are more limited, and their succession seems less regular or necessary. The changes of our government, in short, became, from this period, a fitter object for particular history, but a less suitable one for a general philosophical dissertation. If we consider also, that a good part even of those speculations that might be applicable to later occurrences, had been necessarily suggested in the course of the preceding inquiry, we shall easily understand, how a great part of the novelty and interest of the subject has been exhausted, and how a more eventful period has furnished matter for a less interesting discussion. Without supposing any decline of genius, or abatement of diligence in the author, it is easy to conceive, that he could not always be original upon such a subject, and that he must sometimes be forced to borrow from other authors, and oftener to repeat what had been previously advanced by himself.

The first part of the third volume contains a review of the government of Scotland, which is almost a copy, in miniature, and in fainter colours, of the delineation that had previously been given of that of England. The advancement of monarchy was retarded, however, and the reign of the feudal aristocracy prolonged in the former country, Mr Millar observes, partly by the rugged and inaccessible nature of the territory, which surrounded every great baron with a sort of natural barrier, and partly by the slow progress of those arts and manufactures which were to raise his retainers into independence. The early history of the Scottish Parliament is still involved, however, in considerable obscurity; and all that Mr Millar has concluded upon the subject, is, that during a period of two hundred years, at least, it was composed of the barons, who sat there in their own right; of the dignified clergy; and of a small number of burghesses. In consequence of it never having been divided into two houses, the barons possessed the whole legislative authority; and, in spite of the institution of the 'Lords of the articles' which had a tendency to subject it to Royal influence, there is something very remarkable in the rude and imperious manner in which this national council appears to have treated their Sovereign. The following passage, we think, is very curious.

'It was the practice in England, as I had formerly occasion to observe, that an act of Parliament should proceed upon a petition from the two houses to the Sovereign, requesting that some grievance might be redressed, or some branch of the public administration altered. This

Humble and respectful mode of proceeding never had place in Scotland, where we see the national council holding a very different language. They assume a dictatorial tone; avow the enactment of laws by their own authority; and even frequently ordain, without ceremony, that the King shall carry their measures into execution.

“ Thus, in a statute made in the reign of James the First, it is said, “ the Parliament has determined and ordained, that our Lord the king shall *gar* {cause to} mend his money, and *gar* strike it in like weight and fineness to the money of England *.”

“ In another statute, the *Parliament ordains*, that the king shall command the judges to distribute justice impartially between the poor and the rich, and that he shall rigorously punish those who do otherwise †.

“ In the reign of James the Second, the *three estates order*, that courts shall be held at certain seasons throughout the kingdom; and that the king himself shall be in each town when the court is held, or near it, where his council thinks fit.—The *three estates have also concluded*, that the king shall ride through the realm when information is received that rebellion, slaughter, or other atrocious crimes, have been committed, and shall cause immediate cognizance thereof to be taken ‡.

“ In the reign of James the Third, the *lords*, understanding that there has been great *slack* in the execution of the laws relative to bringing in and keeping the bullion, so as to occasion great scarcity thereof, they require, that the king shall put the statutes on that subject *sharply* in execution, and shall appoint true and able *searchers* for the time to come §.

* The style of the legislature was gradually softened and varied in later times; but the custom of passing statutes in the name of the three estates of parliament is continued occasionally through the reigns of James the Third, of James the Fourth, and of James the Fifth ||.

“ The course of parliamentary business in England, by which every bill passed through both houses in the form of a petition to the Sovereign, produced, of necessity, a negative in the Crown; for a petition would have no force unless when granted by the person to whom it was addressed. But in Scotland, where statutes were enacted by the general authority of Parliament, there was no foundation for this controlling power of the Monarch. As parliament, in that country, was not divided into two houses, the King does not appear to have constituted a separate branch of the legislature. He seems to have been originally regarded as the president of that assembly, and his voice to have been included in its general determinations. In the early history of the Scot-

ish

* Parl. i. ch. 25. *Black Acts.*

† *Ibid.* ch. 49.

‡ Ja. II. ch. 5. and ch. 6. *Black Acts.*

§ Ja. III. ch. 80.

|| See instances of this, Ja. III. ch. 130. ch. 131. ch. 132.—Ja. IV. ch. 37. ch. 82.—Ja. V. ch. 4. ch. 102.

ish parliament, we meet with no traces of the interposition of the royal negative upon bills : the style and tenor of those transactions is, at the same time, utterly repugnant to any such idea ; and there occur instances of statutes which are known to have been enacted in direct opposition to the will of the Crown. The religious reformation which took place in the reign of Mary, derived its authority from an act of the legislature, to which the assent of the Queen, or of her husband the King of France, was never obtained, but which does not appear, either at that time or afterwards, to have been considered, on that account, as defective.

‘ The Scotch house of parliament had thus the uncontroled power of legislation. It exercised, also, the exclusive privilege of imposing taxes, together with that of directing their application to the particular purpose, and of superintending the expenditure of the money. It was accustomed to determine peace and war ; to regulate the forces ; to appoint governors of the fortresses in the kingdom ; and to make provisions for arming the people, and for traiping them up to the use of arms.’ Vol. III. p. 46.—50.

The princes did not escape from this state of degradation till their elevation to the throne of England had invested them with a power and a splendor which no Scotch chieftain could presume to rival. Upon this occasion, Mr Millar very ingeniously remarks—

‘ But while the nobles in Scotland were thus easily reduced under subjection to the crown, the people at large were not raised to suitable independence. In England, as well as in many other European governments, where the prerogative advanced gradually and slowly, in consequence of the gradual advancement of society, the King was under the necessity of courting the lower orders of the community, and of promoting their freedom, from the view of undermining the power of the nobility, his immediate rivals. But in Scotland, after James the Sixth had mounted the English throne, neither he, nor his immediate successors, had any occasion to employ so disagreeable an expedient. They were above the level of rivalry or opposition from the Scotch vassals of the Crown ; and had therefore no temptation to free the vassals of the nobility from their ancient bondage. A great part of the old feudal institutions, in that country, were accordingly permitted to remain, without undergoing any considerable alteration ; and the troublesome forms and ceremonies, formerly used in the transmission or conveyance of landed property, continue, even at this day, to load and disfigure the system of Scotch jurisprudence.’ Vol. III. p. 74. 75.

The concluding part of this review of the government of Scotland, contains a theory and delineation of the Scotch national character, which may not only amuse our English readers, as the production of a native, but may serve as an example of the manner in which Mr Millar attempted to account for every thing by

the general situation of the society. After observing that the reformation in Scotland was introduced by the people against the will of the Sovereign, and of the greater part of the nobility, and that the theological controversies in which they were consequently engaged, had a natural tendency to excite and sharpen their intellectual faculties, he remarks, that the institution and success of our parish schools is rather to be regarded as the effect, than as the cause, of this general desire of information ; and that they would not probably have been established, and certainly could not have been attended, if there had not previously existed an effectual demand for the instruction they were calculated to convey. He then goes on as follows :

“ While the Scottish nation, in general, received an intellectual stimulus, by the violent impulse given at the Reformation, the lower and middling ranks of the people were peculiarly affected by the slow progress of manufactures. In England, a great proportion of the inhabitants, engaging in active employments, and having their attention fixed upon minute objects, acquired, by their situation and habits, great professional skill and dexterity ; but, in every thing beyond their own trade or profession, remained proportionably destitute of experience and observation. In Scotland, on the contrary, the great body of the people were either idle, or slightly occupied by a coarse trade or manufacture, in which various branches of labour were united ; so that the same persons, though less dexterous or skilful in any one department, were not prevented from attending successively to a variety of objects, from applying themselves to different pursuits, and, consequently, from attaining different kinds of information. From such a difference of circumstances, knowledge, as well as labour, came, in the one country, to be minutely divided ; and, though a great quantity of this mental treasure was contained in the whole aggregate, yet, from the manner of its distribution, a very small portion commonly fell to the lot of an individual ; whereas, in the other country, though the sum-total of improvement was inconsiderable, yet that little was not appropriated in such diminutive parcels, but remained, in some measure, as a common stock, which every member of the community might bring at pleasure to market.

“ In all parts of the world, it is accordingly observable, that the great body of the people, while they remain in a state of rudeness and simplicity, are distinguished by their intelligence, acuteness, and sagacity ; and that, in proportion to their advancement in commerce and manufactures, they become ignorant, narrow-minded, and stupid. But, in the period of the Scottish history now under consideration, the lower and middling classes of the people were placed in the former situation ; at the same time that, from the causes already mentioned, the more enlightened part of the nation was not altogether destitute of literature and philosophy. While a great number of all ranks were neither im-

mersed

mersed in business, nor engrossed by the early pursuit of gain, they were at leisure to procure instruction, to go through a regular course of education at schools and universities, and to spread over the community a relish for such parts of learning as was then fashionable. A strong predilection for what are called the learned professions, became thus very prevalent in Scotland; and men of an active disposition, little accustomed to an ordinary routine of employments, were easily induced to change their professional objects, or even to migrate into foreign countries for the purpose of advancing their fortune.

“ The intelligence, sagacity, and disposition to learning, in the common people of Scotland, were inseparably connected with that modesty and reserve which makes a distinguishing feature in the manners of all rude and simple nations. These qualities proceed from the necessitous condition of mankind antecedent to the improvements of society, when, from the difficulty of supplying their own wants, they have little opportunity or disposition for exercising a mutual sympathy or fellow-feeling with each other; and, consequently, are ashamed and unwilling to disclose the secret emotions and sentiments which they know will meet with little attention or regard. That style of distance and reserve which the Scots possessed in common with all rude nations, was confirmed, we may suppose, and peculiarly modified by the nature of their government and political circumstances. As the common people were extremely dependent upon the higher classes, they became necessarily cautious of giving offence, and desirous of recommending themselves to their superiors by an obliging deportment, by obsequious attention, and by a studied expression of zeal and affection. The habits produced by such a situation are, doubtless, not very favourable to plain-dealing and sincerity, however they may fit the possessor for the intercourse of the world, and render him expert in smoothing the frowns or improving the smiles of fortune.

“ The national characters bestowed upon the inhabitants of different countries must be received with large allowances for exaggeration and prejudice; though, as they proceed upon general observation, they have usually a foundation in truth. In this light, we may view the character of the Scottish nation delineated by her English neighbours; and, so far as the picture is genuine, it will, perhaps, be in some measure explained by the foregoing remarks.

“ The shrewdness, cunning, and selfishness, imputed to the people of Scotland, are merely the unfavourable aspect of that intelligence and sagacity by which they are distinguished above the mere mechanical drudges in the southern part of the island, and by which they are more able to discover their own interest, to extricate themselves from difficulties, and to act, upon every occurrence, with decision and prudence.

“ They are accused of not being over-scrupulous with respect to the dignity of those methods by which they endeavour to better their circumstances. It is to be feared that this accusation has no very pecu-

liar application to the inhabitants of the north. If it has any real foundation, it must undoubtedly be imputed to the debasing effects of the old Scottish government, and to the long continuance of that poverty and dependence, from which the people, in our days, are but beginning to emerge.

'The national spirit of Scotchmen has been much taken notice of; insomuch that they are supposed to be all in a confederacy to command and extol one another. We may remark, that, as candidates, either for fame or profit, in the London market, they are greatly the minority; and it is not surprising, that in such a situation they should feel a common bond of union, like that of strangers in a hostile country.' Vol. III. p. 89—95.

The history of the English government under the house of Stuart, is a subject of licensed and inexhaustible controversy. It is a subject, indeed, that seems to be set apart and consecrated as a field of political contention, in which every writer must choose his side, and engage his antagonist. Into this *arena*, however, we by no means propose to venture ourselves, and have no inclination, indeed, to detain our readers very long with an account of the combat which Mr Millar maintains in it. The greater part of his treatise upon this subject may be considered as a formal answer to Mr Hume's history, or a specific antidote to the poison which he imagines it to contain. Though the differences that prevail upon this subject will probably never be composed while the constitution of this country exists, it is not a little remarkable, that all parties are now agreed upon the principle by which they should be determined, and that the dispute relates only to the degree or extent of its application. Mr Hume admits, that Charles the First attempted many arbitrary things, and was guilty of great errors and imprudence; and only apologizes for him on the ground of his hereditary prejudices, the necessity of his situation, and the distrust which was naturally inspired by the increasing boldness and exaction of his Parliament. Mr Millar, on the other hand, without absolutely rejecting these apologies, acknowledges that the Parliament ultimately carried their precaution and their vengeance a little too far; that their patriotism was tainted with fanaticism; that their republicanism was not seconded by the voice of the nation; and that it paved the way for the usurpation and military despotism of the protector.

There is undoubtedly a great deal of truth, and a great deal of partiality in the statements of both writers: neither of them suppresses or fabricates facts; but they both give them that disposition and arrangement that is calculated to favour their party. Mr Hume certainly magnifies the tyranny and arbitrary conduct of Elizabeth, when he compares it to that of a Turkish Sultan;

in order to extenuate the unpopular measures of her successors; and Mr Millar certainly does not make a very satisfactory answer to this representation, when he proves the constitution of England to be a limited monarchy, from the writings of Fortescue, in the days of Henry II. Upon this general point, however, we are satisfied that Mr Millar is in the right, and that the government of England was always considered as distinct from the absolute monarchies that existed over the greater part of the Continent.

On the other hand, though Mr Hume has certainly aggravated the absurdities of the puritanical leaders of that age, and omitted no opportunity to hold up the fanaticism of the Parliament itself to derision, it can scarcely be doubted that Mr Millar has ascribed to them a far more unmixed and liberal spirit of patriotism, than they really appear to have possessed. It would be a hard problem, indeed, to determine what proportion of their acts should be referred to their impatience of civil oppression, and what to their religious discontents; but that the latter had a very important share in their decisions, and was the main-spring of much of their zeal and activity, does not appear to admit of a doubt.

Mr Millar is rather acrimonious in describing the conduct, and delineating the character of Charles I. He does not scruple to say, that he deserved death upon every principle of justice; although he is inclined to think, that it was not expedient to take away his life, against the general voice and inclination of the community. He considers his execution as a necessary step towards the establishment of a republic; and takes some pains to convince his readers, that a republic is the most suitable form of government, either for a very small or a very extensive country. We subjoin a part of this passage, as a specimen of the coolness with which this author conducts his speculations on the most inflammatory questions in the whole science of politics.

" If, by a republic, is meant a government in which there is no king, or hereditary chief magistrate, it should seem that this political system is peculiarly adapted to the two extremes, of a very small and a very great nation. In a very small state, no other form of government can subsist. Suppose a territory, containing no more than 30,000 inhabitants, and these paying taxes, one with another, at the rate of thirty shillings yearly; this would produce a public revenue, at the disposal of the crown, amounting annually to 450,000l., a sum totally insufficient for supporting the dignity and authority of the crown, and for bestowing on the king an influence superior to that which might be possessed by casual combinations of a few of his richest subjects.

" Suppose,

" Suppose, on the other hand, a territory so extensive and populous as to contain thirty millions of inhabitants, paying taxes in the same proportion ; this, at the free disposal of a king, would bestow upon him an annual revenue, so enormous, as to create a degree of patronage and influence which no regulations could effectually restrain, and would render every attempt to limit the powers of the crown in a great measure vain and insignificant. In such a state, therefore, it seems extremely difficult to maintain the natural rights of mankind, otherwise than by abolishing monarchy altogether. Thus, in a very small state, a democratical government is necessary, because the king would have too little authority ; in a very great one, because he would have too much. In a state of moderate size, lying in a certain medium between the two extremes, it should seem that monarchy may be established with advantage, and that the crown may be expected to possess a sufficient share of authority for its own preservation, without endangering the people from the encroachments of prerogative. How far England was in these circumstances at the period in question, I shall not pretend to determine." Vol. III. p. 326—328.

There is nothing, we conceive, that shows more conspicuously the unreasonableness of that passion and partiality with which men are still disposed to canvass the transactions of this memorable period, than the unanimity which seems to prevail as to the merits of the Revolution in 1688. It is utterly impossible, however, to conceive, that those who approve of the counsels of Strafford, or lament the failure of the Royal arms in the subsequent contest, should be satisfied with the constitution that was then established, or feel any great veneration for that bill of rights which declared so many of the measures which they had attempted to justify, to be oppressive and illegal. On the other hand, it is not easy to reconcile the opinions of an author, who at one time approves of the conduct of parliament in insisting on taking the command of the militia, and the appointment of the judges and governors of forts, together with the right of creating peers, into their own hands ; and at another, declares himself delighted with a settlement which secured all these prerogatives to the Sovereign. The truth is, that the pretensions of both parties were altogether inadmissible ; and though an ingenious advocate may find apologies for either in the peculiarity of their circumstances and situation, it is obvious that these only apply to the moral conduct of the individuals, and do by no means extend to the merit or demerit of the actions they performed.

Upon some of the preliminary points, it may be difficult to determine to which side a good patriot should have inclined ; but, after the matter had come to the issue of the sword, we are very clearly of opinion, that the success of the parliamentary arms was

was rather to be desired than that of the royalists. The King's victory would probably have subjected the country for ever to an arbitrary and oppressive government : and if a degree of freedom and parliamentary interference had been permitted, it can scarcely be doubted that the old dissensions would have been renewed, and a second war engendered, of greater acrimony, and longer duration, than the former,

Mr Millar is less merciful towards the Usurper, than any of our historical writers that we remember. After enlarging upon his tyranny and injustice, and on the shameless profligacy with which he abandoned all those principles of religion and political independence with which he had set out, he makes the following acute and characteristic remark upon the estimation he has obtained with posterity :

* When we examine the conduct of Cromwell in all its parts, it may seem surprising that his memory has been treated with more lenity and indulgence than it certainly deserves. This may be explained from the influence of popular feelings ; and still more from the character and sentiments of political parties. His great abilities, the success of all his undertakings, and the respect which he commanded from all the powers of Europe, seized the imagination of Englishmen, and were calculated to gratify national vanity. The partizans of the house of Stuart were, at the same time, induced to hold up the favourable side of the policy of Cromwell, in order to blacken the memory of those patriots who were not less the enemies of that usurper than of the absolute power of the Crown. They affected to consider the usurpation of the Protector as a necessary consequence of the attempts to restrain the prerogative ; were better pleased with the protectorate than with a republican system ; and seem to have felt towards him a sort of gratitude for overthrowing that form of government to which they were most adverse.' Vol. III. p. 369—370.

Of General Monk, Mr Millar believes that his original intention, in marching from Scotland, was to seize upon the protector's place for himself ; and that he only took up the idea of restoring the exiled Monarch, when he saw that the sense of the nation was decidedly in favour of that measure. The conduct of Monk was certainly very mysterious, and, in one point, almost inexplicable ; but we do not think there is any great likelihood in the solution of Mr Millar.

In the subsequent part of his treatise, Mr Millar makes but few observations that are not pretty familiar to all who are acquainted with this part of the English history. The precipitate and unconditional restoration of Charles II., he alleges, entailed upon the nation all its former disorders, and almost ensured a second harvest

harvest of tumult and dissension. To the errors and weaknesses of that Prince, he shows no sort of indulgence ; and is a little too harsh and vindictive, we think, even to his unamiable brother, when he seems to regret that he was not compelled to atone for his misconduct by the forfeiture of his life, as well as of his dignity. He says of him,

‘ As the character of this Prince procured no esteem, his misfortunes appear to have excited little compassion. He possessed no amiable or respectable qualities to compensate or alleviate his great public vices. His ambition was not connected with magnanimity ; his obstinacy and zeal were not supported by steadiness and resolution ; though, as it frequently happens, they appear to have been deeply tinctured with cruelty. The gravity of his deportment, and his high professions of religion, were disgraced by narrow prejudices, and by a course of dissimulation and falsehood. His fate was not more severe than he deserved : for, certainly, the sovereign of a limited monarchy cannot complain of injustice, when he is expelled from that kingdom whose government he has attempted to subvert, and deprived of that power which he has grossly and manifestly abused. Impartial justice, perhaps, would determine that he was far from suffering according to his demerits ; that he was guilty of crimes, which, in their nature and consequences, infer the highest enormity ; and that, instead of forfeiting his crown, he well deserved the highest punishment which the law can inflict.’ Vol. III. p. 434—435.

The history of the Revolution, and the subsequent settlement of the constitution, is given rather concisely, and without any reflections of much importance. This part of the work, however, contains a very clear and masterly account of the parties that divided and agitated the nation during this reign : and the following eulogium on the Prince of Orange, is written with more spirit and animation than the greater part of the volume.

‘ It may be questioned who, among statesmen and heroes, have displayed the greatest genius and abilities. It is yet more difficult, perhaps, to determine, who has been actuated by the most pure and genuine principles of patriotism : But, who is the monarch that has conferred the most extensive benefits upon mankind, will hardly be doubted, while the actions of William III. shall hold a place in the annals of the world. Had it not been for the active, the persevering, and the single exertions of this Prince, it is more than probable that Britain would have been subjected both to an ecclesiastical and civil tyranny ; that Lewis XIV. would have subdued Holland, and the estates in alliance with the Dutch ; that the Protestant interest would, in a short time, have been annihilated ; and that the greater part of Europe would either have been reduced to a vast, unwieldy despotism, like that of ancient Rome, or parcelled out among a few absolute .

absolute sovereigns, who, in the struggle for dominion, had been able to retain their independence. But the vigorous defence of the United Provinces, against the attacks of the French King, gave time for opening the eyes of many European princes. The revolution in England broke off at once the connexion of the kingdom with France, and with the Church of Rome; it not only secured her a free government at home, but united her under the same head with the other great maritime state which had arisen in Europe; and this powerful combination was followed by such alliances, and by such military operations, as were sufficient to restore the balance of power, and to frustrate those ambitious designs that were so hostile to the peace and tranquillity of Europe. In fine, the revolution in England kept alive that spark which kindled the flame of liberty in other countries, and is now likely to glide insensibly over the whole habitable globe.' Vol. III. p. 483—5.

The fourth volume begins with a slight review of the government of Ireland, from the first settlement of the English, down to the establishment of its legislative independence in the year 1783. This sketch is written with remarkable clearness and spirit, and contains a very impartial account of the proceedings of the two countries. The succeeding chapter, 'on the political consequences of the revolution,' appears to us extremely valuable. After a short sketch of the constitution as it was then established, and of the precautions by which the Crown was effectually restrained from any abuse of its ancient *prerogative*, Mr Millar proceeds to observe, that the preponderance of this branch of the legislature has now become probable a second time, from the great increase of its secret or indirect *influence*. This influence is derived from the vast increase of its revenue, and of the patronage which has arisen from the extension of the national dominions and establishments. The revenue, Mr Millar observes, is now divided into two branches, the one destined for supplying the expences of government, the other for paying the interest of the national debt. The first is a direct source of influence, as long as the Crown has the appointment of the officers to whom the money is paid. The second also increases that influence, though less directly, in two ways: first, by the successive expenditure of the sums which make up the capital of the debt; and secondly, by the disposal of all the offices connected with the collection and distribution of the taxes for paying the interest. By the depreciation of money, and the general prevalence of habits of expence, Mr Millar allows that the real increase of the revenue is not altogether so great as it appears to be; but, after making a liberal deduction upon that account, he sees great reason for apprehension from the influence of a Monarch whose revenue has increased from two millions

to upwards of thirty, since the period of the Revolution. The nature and extent of his fears, will be best estimated from his own words.

" We may further remark, that the influence, arising from the causes already specified, is apt to be the greater, as it operates upon the manners and habits of a mercantile people : a people, engrossed by lucrative trades and professions, whose great object is gain, and whose ruling principle is avarice : a people, whose distinguishing feature, as a great author observes, is justice—equally opposed to dishonesty on the one hand, and to generosity on the other ; not that nice and delicate justice, the offspring of refined humanity, but that coarse, though useful virtue, the guardian of contracts and promises, whose guide is the square and the compass, and whose protector is the gallows. By a people of this description, no opportunity of earning a penny is to be lost ; and whatever holds out a view of interest, without violating any municipal law, or incurring any hazard, is to be warmly embraced. *Quærendæ pecunia primum.*

From the time of the revolution, accordingly, we may trace, in some measure, a new order of things ; a new principle of authority, which is worthy the attention of all who speculate upon political subjects. Before that period, the friends of liberty dreaded only the direct encroachments of the prerogative : they have since learnt to entertain stronger apprehensions of the secret motives of interest which the Crown may hold up to individuals, and by which it may seduce them from the duty which they owe to the public. To what a height, in fact, has this influence been raised in all the departments of government, and how extensively has it pervaded all ranks and descriptions of the inhabitants ! —in the army, in the church, at the bar ; in the republic of letters, in finance, in mercantile and manufacturing corporations—not to mention pensioners and placemen, together with the various officers connected with the distribution of justice and the execution of the laws, the corps diplomatique, and the members of the king's confidential council. With what a powerful charm does it operate in regulating opinions, in healing grievances, in stifling clamours, in quieting the noisy patriot, in extinguishing the most furious opposition ! It is the great opiate which inspires political courage, and lulls refection ; which animates the statesman to despise the resentment of the people ; which drowns the memory of his former professions ; and deadens, perhaps, the shame and remorse of pulling down the edifice which he had formerly reared." Vol. IV. 94—6.

To counterbalance all these evils, Mr Millar however remarks, that the rapid improvement in arts and manufactures, that has distinguished the same period, has produced a degree of wealth and affluence, which has diffused a feeling of independence, and a high spirit of liberty through the great body of the people ; while the advancement of literature and sound philosophy, has effectually dissipated many political prejudices and

and errors, and introduced such principles as are more favourable to the equal rights of mankind. How far these circumstances may be able to counteract the increasing influence of the Crown, Mr Millar has not determined. The historical view of the government indeed is not carried any farther; and the remaining chapters of the work are occupied with separate dissertations, explaining and illustrating the nature of that process by which the diffusion of wealth and the cultivation of literature, have contributed to the maintenance of a free and independent spirit.

In the dissertation upon commerce and manufactures, we have a very clear and concise abstract of the leading doctrines of 'the Wealth of Nations.' The improvements which have taken place in those departments, have been favourable to liberty, Mr Millar thinks, chiefly in two ways: first, by affording the means of independent subsistence, and even the prospect of unlimited opulence to every industrious individual: and secondly, by facilitating the mutual intercourse of individuals, and enabling them to consult and combine for the redress of their grievances, and the vindication of their rights.

The effect of this increase of industry and opulence upon the character and understanding of the people at large, is opposite in their different circumstances. The subdivision of mechanical labour, has an unquestionable tendency to stupify the faculties, by circumscribing the range of observation and exertion, and reducing the workman very nearly to the condition of a machine: its direct effect upon the character of the lower orders, is therefore unquestionably detrimental. But, on the other hand, the ease and affluence which is diffused in this way through all the middling classes of the community, naturally gives them leisure and inclination for the cultivation of their faculties, and creates a great demand for all the productions of literature and the arts; at the same time, that the labourers in these higher departments, are themselves enabled, by such encouragement, to adopt a division of labour that is attended with its usual advantages. The example of the middle classes descends by degrees to the ranks immediately below them; and the general prevalence of just and liberal sentiments, which are thus spread by contagion through every order of society, serves in some degree to correct the debasing influences of mechanical drudgery on the labourers. Though Mr Millar, is by no means insensible of the efficacy of this corrective, he is of opinion, that it is not sufficiently powerful to counteract the mischievous operation of the opposite principle; and earnestly recommends the adoption of every possible expedient for the instruction and illumination of the lower orders of society. Thus

Thus far the subject of the dissertations is strictly connected with the treatise to which they are annexed; but when, in the succeeding chapter, we are presented with a general division of the kinds of knowledge, and of the liberal arts and sciences, and are afterwards entertained with a long speculation upon the foundations of morality, and the various modifications which it receives in the progress of society, we confess that we lose sight of the Historical View of the English government, and can no longer trace any connexion between these speculations and the political condition of this country after the settlement on King William. Though these chapters contain nothing, perhaps, that is very original or important, they are written with great spirit and sagacity, and have the merit of stating some important truths in a very clear and striking point of view. What the author chiefly enforces is, that an opulent and commercial people are usually very deficient in the attribute of courage; that the higher orders among them become sober, but addicted to gallantry; and that justice, instead of generosity, becomes the reigning virtue of the whole nation.

In the succeeding chapter, which treats of the origin and progress of the sciences of law and government, we meet with a great number of remarks that are more judicious than original. The history of law is borrowed in a good degree from the writings of Montesquieu, Lord Kames, and Mr Smith, though compressed and connected with much of Mr Millar's peculiar talent for simplification. Of government, he observes that it is founded altogether on two principles: the one, which is in a manner instinctive and irrational, he denominates authority, and states as the primitive source of all the governments in the world: the other principle is, a perception of the utility of government, and does not, in general, emerge, till men have advanced pretty far in science and civilization. Under the appellation of authority, he comprehends all that deference and admiration that is excited by superior personal accomplishments, by riches, and by birth, which, when aided and confirmed by long continued habit, form the only foundation upon which the greater part of governments can even yet be said to subsist. When gross abuses have been committed, however, and the faculties of men are called into action by their passions and necessities, they begin to wonder at their own blind submission to evils which they had it in their power to remove, and think of reforming their governments upon a view of their utility alone. The principle of authority, Mr Millar asserts, was the palladium of the partisans of the House of Stuart; and the principle of utility, the guide and symbol of their opponents. The latter of these

these principles, Mr Millar concludes, is evidently destined to take precedence of the other, as men advance in the powers of reasoning and philosophy. Even the Tories have now abandoned, at least in their arguments, the untenable ground of authority, and contend for the enlargement of the regal power, upon no other principle, than its tendency to promote the good-order and ultimate happiness of the community. Though the principle will not do to argue upon, Mr Millar is far from maintaining, that it is either entirely superseded, or without its use in the regulation of human affairs. The sentiment expressed in the following passage is extremely liberal and judicious :

' Upon the whole, it is evident that the diffusion of knowledge tends more and more to encourage and bring forward the principle of utility in all political discussions; but we must not thence conclude, that the influence of mere authority, operating without reflection, is entirely useless. From the dispositions of mankind to pay respect and submission to superior personal qualities, and still more to a superiority of rank and station, together with that propensity which every one feels to continue in those modes of action to which he has long been accustomed; the great body of the people, who have commonly neither leisure nor capacity to weigh the advantages of public regulations, are prevented from indulging their unruly passions, and retained in subjection to the magistrate. The same dispositions contribute in some degree to restrain those rash and visionary projects, which proceed from the ambition of statesmen, or the wanton desire of innovation, and by which nations are exposed to the most dreadful calamities. Those feelings of the human mind, which give rise to authority, may be regarded as the wise provision of nature for supporting the order and government of society; and they are only to be regretted and censured, when, by exceeding their proper bounds, they no longer act in subordination to the good of mankind, but are made, as happens indeed very often, the instruments of tyranny and oppression.' Vol. IV. p. 309. 310.

The last discourse is upon the subject of the fine arts, and is so far connected with the preceding dissertations, and the general subject of the work, that it treats of their gradual progress in the different stages of society, and of the changes which have been produced upon them by the introduction of wealth and manufactures. This essay was left unfinished : it proposed to treat of literary composition in general, under the heads of poetry and eloquence ; but the history of poetry alone is completed, and the work concludes at the point where the discussion of eloquence should have begun. By poetry, Mr Millar means all those compositions, whether in a metrical form or not, the primary end of which is delight or entertainment. Those he divides, somewhat loosely, into epic and dramatic; and endeavours,

in a rapid and animated narrative, to trace the history of each in its progress through a rude and an improved state of society. His representation of the epic poetry of early ages is like that of other critics. It is sublime, harsh, unconnected, extravagant, and unequal: by degrees it assumes more elegance and method; and at length, when the beauties of natural expression are exhausted, and the public ear becomes familiar with wonders, and disgusted with imitation, it sinks, through the desire of novelty, into pointed expression, and correct, but ordinary sentiments. From this stage, Mr Millar alleges, the transition is easy to prose fictions and novels, which are more easily adapted to the occurrences of modern life; and, by pretending to humbler excellencies, are less apt to become ridiculous. This is the natural progress and order of things, when a nation runs its career by an internal impulse, and produces, itself, the models upon which it is continually attempting to improve. In modern Europe, however, the first steps were a little inverted: the writings of the Greeks and Romans became the subject of early imitation; and the childish taste of those ages was more captivated by the wild and fantastic efforts of their declining genius, than by the purer exertions of their earlier days. The gradual refinement of taste corrected this error; and the poetry of Europe grew simple, as well as regular, before it began to die away before the passion for novelty, and the increasing fastidiousness of a more enlightened public. In reality, we are very much inclined to agree with Mr Millar, that, in the present state of society in France and England, it is much to be doubted, whether a long epic poem, however excellent in its way, would be greatly relished by the generality of the people. The judgement and reasoning faculties of men have been improved lately, perhaps in some degree at the expence of their poetical sensibility; and, in a work of any length, we rather believe that the general taste would require something that came nearer the language and incidents of real life, than the metaphors, and majesty, and machinery of an epic composition. Poetry was certainly meant for amusement; and yet, among those who read for amusement, the worst of Mr Lane's novels is perused with greater avidity than the finest passages of Milton.

That part of the essay which treats of dramatic poetry, is written with uncommon spirit and facility. In tragedy, he observes, the great difficulty has always been, for the poet to forget himself, and speak uniformly in the character of his imaginary persons. This difficulty has been greatly increased in those countries that have not adopted blank verse, by the importance assigned to correct versification, and the consequent introduc-

tion of a new standard of excellence. Even in these countries, however, the evil has at length been felt ; and the prose dramas of Mercier and Arnaud seem evidently intended to restore to the French stage the language of nature and feeling, and to reduce the mere beauties of composition to their proper subordinate station. In Germany, where they have begun in this way, the process will probably be reversed. In discoursing of comedy, Mr Millar attempts to adjust the long disputed boundaries of wit and humour by this obvious distinction ; that humour is the talent of exhibiting contrasts and incongruities in human character and conduct ; while wit is the talent of exhibiting such contrasts in objects that have no dependence on the behaviour of mankind. Although this description be very far from accurate, its incorrectness does not prevent Mr Millar from observing, with perfect propriety, that the introduction of refined manners has a tendency to diminish our relish for humour, and to increase our admiration of wit. The first part of this progress is delineated by Mr Millar with so much spirit and characteristic method, that we shall beg leave to lay it before our readers in his own words :

‘ In Turkey, and in some other eastern countries, the contrast between a tall and short man is thought to be a reasonable cause of laughter ; and a dwarf is, therefore, a necessary appendage in the retinue of princes.

‘ Among our forefathers in Europe, the behaviour of a mere idiot was viewed in a similar light ; and a person in those unfortunate circumstances was commonly kept, by men of wealth, as an object of ridicule. When people became too polite to laugh at a real idiot, they substituted in his place an artificial one with a motley coat, and with a cap and bells, to imitate the behaviour of a simpleton, but with occasional strokes of shrewdness and sagacity. This personage afforded entertainment, by appearing, according to the proverb, more knave than fool ; and became at last a professed jester, upon whom the family in which he lived, and their guests, were accustomed to exercise their talents ; but who, at the same time, like the clown of a pantomime, could shew, by his occasional fallies, that he was himself no mean performer in the scene.

‘ Persons of education, however, becoming gradually more expert in this kind of diversion, began to undervalue the studied jokes of these pretended fools, and endeavoured to improve the entertainment by jesting with one another, and by assuming, upon occasion, any sort of character which might contribute to the mirth of the company. The practice of *masquerading*, which came to be universal through a great part of Europe, arose from this prevailing disposition, and gave individuals a better opportunity of exercising their talents, by enabling them to use more freedom with each other, and to appear unexpectedly in a

variety of situations. Such was the style of amusement, which, having prevailed in that period of European manners described by Shakespeare, makes a conspicuous figure in the comic works of that author. As fashion is apt to produce fantastical imitation, it appears that the folly of individuals led them, in those times, to assume or counterfeit those humours in real life; an affection which had become so general, as to fall under the notice of the stage, and to produce a ridicule of the *cheating* humour, the *bragging* humour, the *melancholy* humour, the *quarrelling* humour—exhibited by Shakespeare and Johnson, in the characters of Nym, of Pistol, of Master Stephen, or Master Matthew, and the *Angry Boy*.

‘The higher advances of civilization and refinement, contributed not only to explode those ludicrous pastimes which had been the delight of a former age, but even to weaken the propensity to every species of humorous exhibition. Although humour be commonly productive of more merriment than wit, it seldom procures to the possessor the same degree of respect. To shew in a strong light the follies, the defects, and the improprieties of mankind, they must be exhibited with peculiar colouring. To excite strong ridicule, the picture must be changed; and the features, though like, must be exaggerated. The man who, in conversation, aims at the display of this talent, must endeavour to represent, with peculiar heightening, the tone, the aspect, the gesture, the deportment of the person whom he ridicules. To paint folly, he must for the time appear foolish. To exhibit oddity and absurdity, he must himself become odd and absurd. There is, in this attempt, something low and buffoonish: and a degree of that meanness, which appeared in the person thus exposed, is likely, by a natural association, to remain with his representative. The latter is beheld in the light of a player, who degrades himself for our entertainment, and whom nothing but the highest excellence in his profession can save from our contempt.’

Vol. IV. p. 354—358.

The great exuberance of humour in the productions of English writers, Mr Millar thinks, is to be ascribed principally to the great variety of professions and occupations which exist in this country among persons that are admitted into the same circles of society. Our humour, however, he is of opinion, is declining with the general improvement of our manners; and he is afraid that our serious application to business and politics will prevent us from compensating that loss by a proportionate improvement in wit.

Such is the substance of the volumes that are to carry down to posterity the reputation of a man, from whose conversation no one ever retired without information and delight, and in whom the faculties of just reasoning and animated discussion seemed at all times unimpaired and alert. The publication, we have already noticed, is scarcely equal to our expectations; but it has merits which will

will always be unattainable by ordinary minds : it takes a firm grasp of the subject, and conducts the investigation with a degree of perspicuity that is never overshadowed, and a sagacity that is but rarely deceived. In the political part, all the sentiments that are liable to be disputed, are delivered openly, firmly, and calmly ; and those who do not agree with the author, can neither complain of equivocation, nor plead his example for being angry. When we consider that the substance of this work was originally delivered by Mr Millar in a series of academical lectures, we shall easily be able to account for another peculiarity in its character. Every thing is delivered with studied perspicuity, and a sort of elementary simplicity. The general truth and theory is clearly and boldly asserted ; and the difficulties and detail of the subject are sometimes passed over very slightly. To those who are already proficients in the study, this may not be altogether satisfactory ; but, by the general reader, it will be felt as a great relief : and there are few indeed, even among those who have entered profoundly into the subject, who will not feel their knowledge rendered more manageable, and their conceptions more luminous, by the perusal of Mr Millar's speculations.

ART. XIV. *Athenei Naucratis Deipnosophistarum libri quindecim : et optimis codicibus nunc primum collatis emendavit ac supplevit, nova Latina versione et animadversionibus cum Is. Caſauboni alterumque tum suis illustravit, commodisque indicibus instruxit Johannes Schweiſhäuser Argentoratensis, Instituti Scientiar. et Art. populi Gallo-franc. socius, Antiquar. Literar. in Schola Argent. Prof. Argentorati ex Typographia Societatis Bipontinae. Anno ix. (1801.)*

THREE are few compilations from which the moderns have derived so much of their knowledge of the private life of the ancient Greeks, as from the *Deipnosophists* of Atheneus. It may not be superfluous to inform some of our readers, that the professed object of the writer was to detail to his contemporaries the convivial antiquities of their ancestors, and that he has chosen to convey his information in the form of a dialogue, as the most convenient and amusing. The fable, or plan of the work, is as follows : A considerable number of learned men, among whom we find the celebrated Galen, assemble at the table of Larenſius, a liberal and wealthy Roman, where they bestow as large a portion of erudition on every part of their entertainment, as the memory or common-place book of the author could supply. So much of the business of human life is connected, mediately or immediately, with eating and drinking, that it does

not require any great share of ingenuity to introduce into a work of so miscellaneous a nature, much useful and curious information, which, at first sight, does not appear to be very closely connected with the science of cookery. 'Accordingly,' says the author of the Epitome, 'we find disquisitions on fish of every sort; together with pot-herbs and poultry; not to mention historians, poets and philosophers; likewise a great variety of musical instruments, witty sayings and drinking vessels; royal magnificence, ships of prodigious magnitude, and many other articles, too tedious to mention.' Although this kind of conversation bears no very strong resemblance to the dying speculations of Socrates on the immortality of the soul, our author has selected the Phædo of Plato for his prototype, and has borrowed the beginning of that dialogue, with no alteration, except the substitution of the names of Timocrates and Athenæus to those of Echecrates and Phædo. A strong objection to the dramatic form which the work assumes, arises from the impossibility of collecting the productions of all the different seasons at one banquet. The author seems to suppose that an astonished fishmonger might exclaim, in the words of Theocritus, 'Ἄλλα τὰ μὲν θερινά, τὰ δὲ γεννηταὶ εἰς χειράν.' The loss of the two first books renders us unable to judge how far he was able to palliate this palpable absurdity. The most valuable part of the work is the large quantity of quotations which it presents from authors whose writings no longer exist. The Athenian comic poets afforded an ample store of materials, and Athenæus seems to have been by no means sparing in the use of them. Many of the extracts from their works, which he has inserted in his own, are highly interesting; and the mass is so considerable, as far to exceed in bulk all that can be collected from every other Greek or Latin writer. The number of theatrical pieces, which he appears to have consulted, was probably not less than two thousand. The middle comedy alone furnished him with eight hundred.

Of the author of this work, which has derived so great a portion of additional value from the general wreck which has deprived us of the treasures of the ancients, nothing is known, except a few particulars which he has inserted cursorily in his work. He was a native of Naucratis, a city of Egypt, to which, in the time of its original kings, the approach of foreigners was restricted in the same manner as to Nangasaki in the modern empire of Japan. He declares himself to have been a little posterior to the poet Oppian; and, as that writer dedicates his Halimœnæ to the emperor Caracalla, the age of Athenæus may be fixed at the beginning of the third century of the Christian æra. His compilation immediately became the prey of other compil-

ers, less diligent than himself. Ælian, who was nearly his contemporary, has made use very liberally of the Deipnosophists in his Various History. In a later age we again find our author pillaged by Macrobius, who seems to have taken from him not only many of the materials, but even the form and idea of his *Saturnalia*. But of all writers, ancient or modern, there is none who is so highly indebted to Athenæus as the industrious Eustathius. Although the Archbishop of Thessalonica appears never to have seen the entire work, but to have made use of the Epitome, the stores of his erudition would be miserably reduced, if he were compelled to make restitution of the property of our author which he has converted to his own benefit.

By the same fortunate accident which has preserved a few of the writings of the ancients*, a single copy of Athenæus appears to have escaped from the ravages of time, ignorance, and fanaticism. That copy still exists. After the death of Cardinal Bessarion, who probably brought it from Greece, it passed into the Library of Saint Mark at Venice. In this sepulchre of books it would certainly have continued for many ages, unknown to the learned, if the late revolutions, which have changed the face of Europe, had not caused it to be included in the valuable spoils of Italy which now enrich the national collections at Paris. It consists of three hundred and seventy-three leaves of the largest dimensions. Each page is divided into two columns. It is written without contractions, and from the form of the characters, may be attributed to the tenth century. The subjunctive vowel of the diphthongs *α*, *η*, and *ω*, is never subscribed, but commonly placed after its prepositive, in the ancient manner. The whole orthography is very incorrect, particularly in the division of the words, and the punctuation.

Many transcripts of this manuscript exist in different parts of Europe, which were probably made while it was in the possession of Cardinal Bessarion. All of them betray their origin, as, besides their coincidence in orthographical errors, the same parts

* Among the good qualities of his host Larenfius, Athenæus enumerates his diligence in collecting and preserving the works of ancient authors, which, through the *ἀφίλοκαλία*, the *want of taste*, of the multitude, were almost consigned to oblivion. The art of printing has lessened, but certainly has not removed the danger to which authors are exposed. Perhaps, a hundred years hence, a complete copy of the works of Blackmore may be sought for in vain. We recommend to modern Larenfii the redemption of these and other similar productions from *tapers and defrauded pyes*. We tremble for the future fate of many of the most celebrated of our contemporaries.

are wanting in all of them. The two first books, the beginning of the third, a few leaves in the eleventh, and part of two leaves in the fifteenth, are wanting in the Venetian manuscript, and the deficiency appears evidently to have proceeded from accident. The same *lacune* occur in every other manuscript, but are exhibited in a manner which shews the cause to have existed in the copy from which they were transcribed. It is unnecessary to say that the errors of the Venetian manuscript are in general faithfully retained, and the number of them considerably augmented.

Fortunately for Athenæus, the integrity of his work is in some measure preserved by an Epitome of the whole, which has been transmitted to us without defalcation. This abridgement, if it may be called so, is nearly as bulky as the original work. The age of it is uncertain. It is executed in a careless manner; and the copy which the writer had before his eyes, appears to have suffered so much from time or accident, that he frequently breaks off in the middle of an extract, and declares his inability to decypher the remainder. From these sources our editions are derived; and it will easily be seen that where the original copies are so few and so faulty, conjectural emendation will find ample scope to display its powers. The fact is, that although the game has been considerably thinned by Casaubon and some other sagacious critics, there still remain sufficient materials to exercise the industry of the keenest grammatical sportsman.

The editions of Athenæus are three, or rather five, in number. The first was printed at Venice by Aldus, in the year 1514. Musurus, who was the editor, was obliged to make use of a very faulty manuscript, and to supply the deficiencies of the original from the Epitome; a practice which has been imitated in all the succeeding editions. The *lacuna* in the eleventh book, however, was not perceived; and the corresponding portion of the Epitome did not appear until the publication of Casaubon's commentary. Twenty-one years afterwards, a new edition was published at Basil, which, in most of the passages in which it differs from that of Aldus, recedes still further from the purity of the original. In this edition the passages of Aristotle and Theophrastus, which are adduced by Athenæus, are professedly altered to the readings of the then existing copies, by which means many important various lections in the writings of these two philosophers are completely obliterated. Neither of these editions is accompanied with a translation, or with notes. The third edition is that of Isaac Casaubon, of which there are three different impressions, in the years 1597, 1612 and 1664, which do not differ considerably from each other. To these editions is annexed the Latin translation of James Dalechamp of Caen, which

which was first printed by itself in the year 1583. The Greek text is much more perfect and accurate than in the preceding editions; as in the long interval which elapsed between that of Basil, and the first of Casaubon's, many new manuscripts had been discovered, and much labour had been bestowed on *Athenæus* by some of the most celebrated scholars of that age. There exists an edition of the epitome of the first book by Tumebus, of a prior date to that of Casaubon, in which the editor has indulged great license of conjectural emendation. It seems to have been meant as a specimen of an entire edition; but from the boldness and clumsiness of the alterations, we do not think that it is to be regretted that the design was laid aside.

The most valuable part of the edition of Casaubon is his celebrated commentary, which constitutes a folio of no inconsiderable magnitude. The work is dedicated, with much propriety, to Henry the Fourth, between whose character, and that of *Athenæus*, the author discovers a resemblance which, to common eyes, is certainly not very apparent. The work itself is so well known to scholars, that it would be superfluous to enlarge upon it. We must only observe, that many of the emendations which are proposed by Casaubon are violent and improbable, and that a still greater number may be considered as obvious to any person who is endowed with a moderate share of critical sagacity. Notwithstanding these defects, we know no work of this kind, except perhaps Bentley's dissertation on Phalaris, in which the reader is presented with such a mass of pertinent information. Unlike many commentaries, the text of the author is almost always kept in sight; and the erudition of the critic, although ample, is displayed without ostentation.

Two hundred years have elapsed between the publication of this edition, and the present performance of Professor Schweighæuser. From our previous knowledge of his labours as an editor, we certainly should not have conceived *Athenæus* to be the author most likely to be benefited by his exertions. The editor of an historian, and still more of a moralist, has a much easier and more simple task to perform, than must be undertaken by him who labours in the elucidation of an author of so miscellaneous a nature as *Athenæus*. We cannot avoid wishing that the editor of Appian, Polybius, and Epictetus, had continued in his original course, and had left the Deipnosophists to some person more accurately acquainted with the *minutiae* of Greek literature. It is however far from our intention to speak with disrespect of Professor Schweighæuser: particularly as he candidly admits the deficiencies of which we complain.

The greatest advantage which he has enjoyed, is the collation of the Venetian manuscript, which, as we have already observed,

ed, is now deposited in the grand repository for all the stolen goods in Europe. An accurate collation of this venerable original, almost entirely supersedes the necessity of examining other copies. All readings which are found only in the latter, are to be considered either as mistakes, or as conjectural emendations of the transcriber. We could have wished that the Professor had seen this manuscript with his own eyes. We think that no person ought to undertake an edition, the merit of which depends greatly on the accurate examination of a single manuscript, unless he has an opportunity of inspecting it in person. We have no particular reason to think lowly of the abilities of young Mr Schweighæuser, the actual collater; yet we think that the Professor himself would have had no cause for repentance, if he had spent one of his vacations in the national library at Paris. Besides the Venetian manuscript, he had the use of a valuable copy of the Epitome, from which considerable advantage has accrued both to those parts of the work which exist only in the abridged form, and to those which have been transmitted to us entire.

It would ill become us, who inhabit this metropolis of false quantities, to censure with asperity a Professor of the University of Strasburg, for a fault which is imputed to ourselves by our fellow-citizens of the south. Were it not for this consideration, we should be tempted to inveigh with severity against some of the Iambic verses with which the Professor has presented us, particularly as many of them appear to us to have no other faults than those which are produced by his alterations. We shall exhibit specimens, before we conclude the present article.

We have now before us only two volumes of the text, containing six books, and two of the commentary, containing four. If the edition be continued on the same scale, it will extend to thirteen volumes; and, as the price is by no means low in this country, many readers will be precluded from the use of it. The great price of Greek books we consider as one of the most serious obstacles to the cultivation of that department of literature. In the present case, the expence might have been diminished by omitting the Latin version. Few persons are tempted to read *Athenæus*, except those who do not require a translation. The commentary might also have been compressed considerably, without any injury to the work. As the animadversions of Cesaubon are not republished entire, the present edition does not preclude the use of the former. These, however, are petty objections. The principal point which we are to examine, is the degree of purity to which, by the assistance of manuscripts, the conjectures of other critics, and the sagacity of the present editor,

tor, the text of Athenæus has been restored. We shall exhibit to our readers some of the principal novelties which appear in the six first books. In most places where the editor has deviated from the text of the former editions, he has judiciously placed the common reading under the text. We lament that he has not faithfully observed this rule in every alteration. By these means, the comparison of this edition with the former would be rendered extremely easy. We cite the numerals of the common-editions, which are retained in the inner margin of the present.

P. 3. D. Antiphanes :

οὐ θεωρεῖς ἰλαρος πρεστόν ἔσιν, οὐ κύων
ἔσιν καὶ προσπλέου, * ὑπάντησος τις,
διφρον εἰδένεις ἔσται.

In the second verse, which wants a syllable, Professor Schweighæuser reads ὑπάντησος δὲ τις.

P. 5. B. Plato the Comic Poet :

* * * * εἴγω δ' εὐθαδ' εἰ τηγρεία.

The Professor, who is by no means afraid of a *biatus*, proposes

* * * εἴγω δ' εἰ τῇδε τῇ ἐγρείᾳ.

P. 6. C. Tithonus is said to be suspended in θαλάμῳ, in a bed-chamber. Professor S. reads εἰ ταλάρῳ, in a wicker cradle.

P. 11. D. Aeschylus :

καὶ ταξιδέχας, καὶ στρατιέχας, καὶ ἐκατοντάρεχας
ταξά.

Palamides, whose words these are, could hardly boast that he invented the office of a commander in chief, although he might settle the economy of the inferior leaders. Professor S. reads

καὶ ταξιδέχας, χακατοντάρεχας στρατῷ
ταξά.

P. 23. A. Antiphanes :

τα δ' αὐτισμοντ' εἰσοι δίψαν τινὰ
η ἔργαζεται εἴχοτ', αὐτόπερεν ἀπόλλυται.

Professor S. proposes σχότ' for εἴχοτ' in the second verse : but he is not aware that the second syllable of έργαζεται, which is derived from έργαζειν, is long. The true reading is

- - - δίψαν τιν', η
έργαζεται εἴχοτ', απόπερεν ἀπόλλυται.

P. 35. D. Diphilus :

τὸν τ' αὐτεῦν τολμαῖν τι, τὸν δειλὸν θρασύν.

Professor S. proposes θρασύν. Θαρσοῦ and θερροῦ are common ; but we do not at present recollect an instance of θρασοῦ.

P. 36. F. Alexis :

οὐ μή γὰρ ἀπογνέσκων ἀνδής γίγνεται.

As this verse contains a syllable too much, Professor S. changes the order of the words, and places γὰρ before ἀνδής. The true reading is the participle of the aorist ἀπογνέσθαι, which, being rather uncommon, was altered by the transcriber.

P. 39. Amphis: τὸ νίκταρ πάνι πάττων ἵστιν, διπτίν τ' ἀμβυξοῖς,
καὶ τῷ Διὶ, &c. Professor S. reduces these words to metre in the following manner:

- - - - τὸ νίκταρ ἵστιν, πάνι
μάττων, διπτίν τ' ἀμβυξοῖς, καὶ τῷ Διὶ, &c.

We would prefer the omission of the article before νίκταρ, and would read:

- - - - πάνι μάττων ἵστιν
νίκταρ, διπτίν τ' ἀμβυξοῖς, &c.

P. 40. E. Alexis:

τοὺς εὐτυχῶντας ἐπιφανῆς δῆ ζῆν [αἱ]
φανεράν τε τὴν δόσιν τοῦ θεοῦ ποίειν.
οὐ γὰρ διδακτὸς τάγαθε, [τούτους] τὸν μὲν, ὡς
πεποιηκεν, [αὐτοὺς] οἴσται χάριν τινὰ
ἔχειν ἔσυτρ.

The words in brackets were added by Casaubon to fill up the metre. We believe that the passage has already been corrected as follows:

- - - - τοὺς εὐτυχῶντας ἐπιφανῆς
δῆ ζῆν, φανεράν τε τὴν δόσιν τοῦ θεοῦ
ποίειν. * * οὐ γὰρ διδακτὸς τάγαθε,
δι μὲν πεποιηκεν οἴσται χάριν τινὰ, &c.

By this arrangement we avoid the interpolations as well as the spondee in the fourth foot of the second verse. Although it is not our intention to propose emendations in Athenaeus, except in passages where Professor S. has preceded us, we must suggest the substitution of ἀχαρίστους or ἀχαρίστος for ἀχαρίστους in the concluding part of this fragment.

P. 48. A. As a specimen of the ingenious manner in which Professor S. distributes those verses which are commonly written as prose, we will insert a fragment of Menander, from the *Prætermissa ex Libro secundo*, which probably belongs to this place. The Professor remarks, ‘*Versus utcunq; pro meo sensu, distribui.*’ We denote his distribution by obelisks:

ἴργος [ιοτίν] εἰς τρίκλεινος + συκκυπίας εἰσποτοῦ·
+ εὖ λαβὼν τὴν κυλικα + πέριτος ἀρχεσται λόγους + πατήρ·
καὶ παρακίσσεις + πίπακιν. + μὲν μάτηρ διετίσα·
· μὲν τὸν παραδεῖπνον τοῖς + μὲν βαρύφανος γέροντος,
+ γηρίδος πατήρ· ἕπεται + γηρᾶς παλαῦσσα φίληταρ·
· οὐδὲ ἐπινίν πάσι τούτοις. 1

P. 49. E. Alexis:

καὶ μὴν ἐν ὑπνῳ οὔραις ὀργανίναις
νικητήσον. λέγ' αὐτό. τὸν τοῦτο πρόστιχο δῆ.

Professor S. proposes νικήτηρον. We would read;

καιρόθιν ἐν ἴντικτοις οὔραις νικητίκοις,
ἐργαζέναις. λέγ' αὐτό, &c.

We observe that in some places Professor S. has restored the true orthography ιγαρα. In the passage which immediately follows that which we have just cited, the same alteration is to be made:

* * ιγαρας παῖστος ιοκνασχέναις,
ιγνοτορος, η σπλαιν' ἐπτέρεισθυλεμένος;

P. 55. A. Alexis :

κύαμος, θίγμος, λάχανον, γονγυλίς,
ἄχρος, λάθυρος, φηγὸς, βολβὸς,
τέττιξ, ἐρέβινθος, ἄχρας. &c.

Anapaestic verses composed of three feet, like the last of these, are not infrequent in the present edition. This passage affords an instance of the corruption of the text by the casual insertion of a marginal gloss. Θάγμος is *not*, and θίγμος is a *lipine*. Λάχανον is therefore an explanation of θίγμος, and ought to be expunged; after which the verses will stand as follows:

Κύαμος, θίγμος, γονγυλίς, ἄχρος,
λάθυρος, φηγὸς, βολβὸς, τέττιξ,
ἐρέβινθος, ἄχρας, &c.

P. 59. E. Epocrates :

καὶ τί ποτε ἀρέωσαντο, καὶ τίνος γένους
εἴπαι τὰ φύταν δῆλωσον, εἰ κατοῖσθα τι.

To these two Iambic verses, the Professor has substituted three Anapaestics *du si saqon*, which we recommend to the reader's attention, as a curious specimen of emendatory criticism:

καὶ τί ποτε ἀρέωσαντο,
καὶ τίνος εἴπαι γένους τὸ φύτον;
δῆλωσον γ', εἰ τι κατοῖσθα.

P. 60. D. Antiphanes :

νῦν δεῖ περισσαὶ πίκηρι καὶ καρπὸν βλίτου
ζῆται.

Περισσαὶ in the Attic dialect stands for *περισσῶν*. One instance occurs in a passage of Phryniichus, which we shall cite hereafter. The Professor reads *περισσῶντα*, and removes *νῦν* to the preceding verse.

P. 66. D. Ophelion :

Λιβυκὸν τε πίπερι, θυρίαρια, καὶ βιβλίον
Πλάτωνος ἐμβρύωντον.

The Professor reads *βιβλίον*, which we presume to be a *second*. We prefer the omission of *καὶ*. With the exception of *γ'*, hardly any word is so frequently interpolated as *καὶ*.

P. 87. F. Posidippus :

ἄρα περισσαὶν ἐγχέλια, καὶ καρπόσους,
κενγκας, ἐχίνους προσφάτονες, μυκάνια.

The true reading is unquestionably *ἐγχέλια*, *καρπόσους*: *κενγκα* being understood.

P. 102. A. Damoxenus :

εἴ τ' οὐδὲν εἰκῇ παρατίθει, μαρθάνει;

This verse exhibits a singular instance of interpolation. In all the editions, except that of Aldus, we read:

εἴ τ' οὐδὲν εἰκῇ παρατίθει τοῖς συμπτώμας.

In which, besides the impropriety of *παρατίθει*, which signifies *If it before my self*, we have a dactyl immediately before an anapaest.

P. 105. A. Epiecharinus :

ἴτι δὲ ἀσταχοι, κολύβδαιναι τ', ἔχοισι τὰ πόδια
μυκα, τὰς χεῖρας δὲ μαντεῖς, καρφος δὲ τῶνυμα.

The κολύβδαια appears to have been of a species entirely different from the κάραβος, which was of the lobster kind. Instead of the words ἵχοις τὰ πόδια, the Venetian manuscript reads ἵχοστα πόδι ἵχει. By changing the division of the words, and introducing the proper contraction of καὶ ὁς, we find the true reading of this passage :

ἵχει δὲ ἀσταχοί, κολύβδαιναι τι, χῶς τὰ πόδι ἵχει
μικρὰ, &c.

P. 107. C. Alexis :

χρέαδια, ποδάρια, ῥύγχη τινὰ, ὀταῖς,
ὑπὸν ἡπτέτιον εὐκακαλυμμένον.

The first of these distorted verses is left untouched by our Professor ; but he endeavours to correct the second by reading ἐπικακαλυμμένον. Both of them should be altered in the following manner :

χρέαδια, καὶ ποδάρια, καὶ ῥύγχη τινὰ,
ὤταῖς' οὐτι, ἡπτάτον εὐκακαλυμμένον.

The verse which immediately follows is also infested by a false quantity : αἰσχύνεται γαρ, πελιδίον σι, τῷ χρωματί.

We believe that the syllable is of necessity made long before ΔΝ ; for which reason we should prefer ὑσχύνεται, which suits the sense equally well. We observe a small error in the beginning of this fragment, which Professor S. has passed over unnoticed. The common reading is :

πρῶτον μὲν ὅστρεια παρὰ Νηρῆι τινὶ ιδῶν
γέροντι φύκοι [οὐ φύκος] ἡμιφιεσμένη, &c.

Correct :

πρῶτον μὲν οὖν ὅστρεια παρὰ Νηρῆι τινὶ^{ιδῶν}
γέροντι φύκοι [οὐ φύκος] ἡμιφιεσμένη, &c.

P. 107. E. Alexis :

αἰσχυνόμενον ἡπαρ καὶ καπρίσκους καταφαγοῦ.

Correct :

αἰσχυνόμενον ἡπαρ καπρίσκους σκατοφάγου.

P. 117. F. Alexis :

αἴ τοι μετὰ ταῦθ' οὐ ράφανος, οὐ ἐβοᾶτ' εἴ τας--
χερστὴ γάρ οὐ τέλος ταῦτης δύ' οβίδους.

Thus Professor S. chuses to read, with a spondee in the last foot of the first verse ; a practice which, from its frequency in the present edition, we conceive to be much more allowable at Strasburg, than on the Attic stage. Such of our readers as are scrupulous in admitting this license, may correct :

A. αἴ τοι μετὰ ταῦθ' οὐ ράφανος, οὐ ἐβοᾶτε. B. ναί
χερστὴ γάρ οὐ. A. ἐδώκα, &c.

'Η ράφανος οὐ ἐβοᾶτε is the cabbage which you praised. In the same fragment the Professor begins an Iambic verse with ὁς πυρετός ἀπῆιν. We could produce many instances to prove that Professor S. does not coincide in opinion with those critics who conceive a Dactyl or a Tritrach to be inadmissible before an Anapæst.

P. 119. F. Menander :

ἰπέπατος ἵπι τὸ τάρειχος (ἄλας), οὐ οὔται τίχη.

The Professor informs us that he has included the word ἀλας within brackets, because he conceives that it has intruded itself into its present seat from the conclusion of the preceding verse. We should prefer

- - - - - ἐπίπαστα
ιπὶ τὸ τάριχος ἀλας, ἵν τούτῳ τύχῃ.
P. 124. C. Strattis :

- - - - - οἵ γε γὰρ πιστοί
οὐδὲν εἰς δέξαιτο θερμόν, ἀλλὰ πολὺ τούπαντίον,
ψυχόμενον ἐν τῷ φέρεται, χάριν συμμεμιγμένον.

The Professor has converted these Trochaic verses into Iambic, with no other alteration than the permutation of the second and third words. The common reading of the third verse is μητριγένεον. He scans the whole verse in the following manner :

- o o | o - | - o - | o o o | o o - | o -
P. 131 A. Amphis :

καὶ ταῦτα ποῖοις, ὀποτε φρεάτω,
λαυκροῖς δύποις δέξεθ' [read δέξουεθ'] ὑμᾶς,
οὐδὲν φροῖσι τοῖς Ἀφικράτοις
τοῖς ἐν Θεράπην καὶ τοι φασίν
βύθακας αὐτὰ γενόδαι.

Instead of this word βύθακας, which Professor S. has inserted from the Venetian manuscript, some copies have βυθακάλους, and the editions read φιλοκάλως. We do not pretend to interpret it. In the following lines, Professor S. introduces ἀλονγῆ, without citing any authority for the use of it. The Venetian manuscript reads φάσιν, instead of φάσ', in these verses :

διπνεῖς δ' ἀνδρας βούτυρος φάσ',
αὐχηποκρίμας, μυριοπληθίς.

The true reading is probably βούτυροφάγους. In the same fragment we read :

πίναι, λεπάδεις, μίνε, ὄστρεα,
κτίνεις, ὄρκυνεις, &c.

Professor S. endeavours to restore the metre by reading μῆνις τ', ὄστρεα ; in which three words there are five faults. In the first place, the first syllable of μῆνις is short : secondly, an Attic comic poet would write μῆνε, in the contracted form : thirdly, the conjunctive particle is inappropriate in this place : fourthly, the last syllable of ὄστρεα is long by position, as coming before κτίνεις : fifthly, the Attic writers generally, if not always, write ὄστρεα. All these errors may be avoided by reading μῆνε, ὄστρεα.

P. 161. A. Antiphanes :

τῶν Πιθαγορικῶν δὲ ἔτιχον ἀθλίοις τίνεις, &c.

This elegant Iambic is the production of Professor S. The common reading is δὲ τυχόν. We presume that the whole verse should appear as follows :

τῶν Πιθαγορικῶν δὲ ἔτιχον ἀθλίοις τίνεις, &c.

P. 165. B. Phrynicus:

ἴσιος δὲ αὐτούς γε φυλάπτει τὸν οὐ χαλεπέστατος ἄργος.
ἔχουσι γάρ τι κίνησον τοῖς δακτύλοις μισθίσασιν αὔθες ἡβᾶς·
αἴδεντες γάρ τοις δακτύλοις ἀπάνται ἀλλα, κατὰ τὴν πηγορᾶν περίσσεται·
ἐπεὶ τοῖς βάθεσιν ὅτε ἀντὶ τῶν ικανῶν τούτων εἰς ἀδυλογοῦσι,
μεγάλας αριγάτος καταπίκαστος, καὶ συγκρήματος ἀπάνται,
γελάσι.

We give these tetrameter Anapæstics as they are written in the Venetian manuscript, without pretending to correct them. Professor S. has arranged them in another manner, with some interpolations. In his disposition, not one of them, except the first, can be scanned.

P. 166. C. Axionicus:

----- ὁ Πινδόπλος εὗτος [read εὐτοῖ]·
ισοβαλλίον προσίσχεται ἐπικαλούμενος,
ἀστοτάτος. -----
μεθίουσα τὸν ἔπιστρεψανταί σοφωτάτη
ἀποτυμπωτικὰς κατὰ πόδας πορεύεται.

In these corrupt lines, we conceive ἀστοτάτος to be a gloss on ισοβαλλίον. Professor S. reads ἀστοτάτος, which is certainly wrong. For ἀποτυμπωτικὰ he substitutes ἀπὸ τυμπάνου ἰσχὺς, conceiving the *biax* to be as legitimate in Iambic as in Hexameter verses.

P. 224. D. Amphis:

λαβεῖν τὸν ἀπάρτιον ἢ ἐπεργάτη τοι, ή
πρὸς τοὺς, &c.

As the first of these verses wants a syllable, Professor S. inserts τοι after ἢ. We believe that a much neater correction has been offered:

λαβεῖν τὸν ἀπάρτιον ἢ ἐπεργάτη, &c.

P. 226. A. Alexis:

οὐ γέγονεν κρίτην γεμοβότην τοῦ πλευρίου
Ἄριστονού τίτλοις γάρ τοις γόμοις.
τοῖς ἵχθυσικαλῶν ὅσις ἀν πωλῶν γε τὸν
ἵχθυν ὑποτιμήσας, ἀποδῶτ' ἐλάττονος
ἥς οὐ πει τῷν, &c.

We presume that it is sufficiently evident that we may read: οὐ τίτλοις γάρ τοις. Professor S. reads τίτλοις, which has a different meaning. Ήδην γόμοι means to make a law by one's own authority: Ήδην γόμοι is to propose the making of a law in the legislative assembly. It is in this latter sense only, that Aristonous, who was probably some demagogue of that age, could be called a lawgiver. Perhaps, however, the whole passage is to be differently arranged:

οὐ γέγονεν κρίτην γεμοβότην τοῦ πλευρίου
Ἄριστονού. * * * τίτλοις γάρ
ὑποτιμήσας τοῖς ἵχθυσικαλῶν ὅσις ἀ,
ἴχθυν ὑποτιμήσας, &c.

The γάρ in the third line is wanting in the manuscripts, and perhaps the other words which we have omitted were added to supply the deficiency which we have indicated by asterisks.

P. 243. D. The following Trochaics of Anaxandrides have been converted by Grotius, not without considerable omissions and alterations, into what that eminent man possibly conceived to be Iambics. Professor S. has faithfully retained the arrangement of his predecessor. We give them entire, because the Venetian manuscript exhibits them with some various readings of consequence. We do not pretend to understand all the local wit which is contained in them :

ιμεῖς γὰρ ἀλλήλους ἀνί κλενάζετε, οὐδὲ ἀκριβεῖστε·
ην μὲν γαρ οὐ τις εὐτρέπτης, ιερὸς γάμους καλεῖτε·
ἴαν δὲ μηδέ παντικῶς ἀνθράκιον, σταλαγμόν·
λαμπτός τις ἔβελύνθεται; ὁδολυγμός οὐτός ἐστι·
λιταρός περιπατεῖ Δημοκλῆς; ζωρὸς κατανόμασται·
χαίρετις τις αὐγυμάνη ἡ βυτᾶν; κονιορτός ἀνεπίφυτην·
ὅτιδεν ἀκολουθεῖ κόλαξ τῷ; λέιβος ἐπικέκληται·
τὰ πόλλα ἄδειτον περιπατεῖ; καττρέος ἵστις θητοῖς·
οἱς τοὺς καλοὺς δὲ η τις βλέπει, καὶνδε βεατότοτες·
ὑψηλέστεροι ἄργα ποιμένος παιῶν; Ἀτρεὺς ἐκλίθη·
ἴαν δὲ κρίος Φερίζος· ίαν δὲ καδύσιον, ίασουν.

P. 247. C. Dipilus :

----- εὐκ ἀν ποτε
Εὐρηκίδης γνωτικα σώσι. οιχ εφές, &c.

In the common editions, σώσι, being written without the apostrophe, is mistaken by Professor S. for the future. He reads σώσει, without informing us in what manner the verse is to be divided into feet.

P. 258. C. Alexis :

Ιων τριάκοντας ἀφ' ἱὸς ἑργαστηγού.

Professor S., who does not suspect that the second syllable of τριάκοντα is long, proposes the introduction of γι after Ιων.

P. 269. F. Metagenes :

οἱ μὲν ποταμοὶ οἱ καθάδι οἵτινι παταρέου
μαζας μεγιστας αἰγαράτας μιμαγγαράτας·
οἱ δὲ ἔπειρος γε, οἱ Σύβαρις καλούμενος
ποταμὸς, ὀθινὶ κύμα γαστρῶν καὶ κεῖσι, &c.

The Professor observes that the two latter verses of this ῥῆσις are corrupted, but he does not attempt to emend them. Probably several of the words are a gloss, and the whole is to be read in one verse :

οἱ δὲ ἔπειρος ὀθινὶ κύμα γαστρῶν καὶ γεῖσι.

In the same fragment we observe πιει at the end of a verse, and τινίσιον ἕπταις at the beginning of the next. Correct πιει τινίσιον ἕπταις in one line.

In the cursory survey which we have taken of Professor Schweighæuser's emendations, we have seldom endeavoured to refute them, except when a preferable reading suggested itself to us. We have observed, with a considerable degree of surprise, a very large number of passages, which had been restored by the sagacity of different critics, but which, in this edition, remain in the same state in which they were left by Cäsarion.

We have to lament that Professor Schweighæuser has not devoted a larger share of his attention to that kind of criticism, from which alone a correct edition of Athenæus can be expected. Unquestionably the present publication is valuable in some respects: the epitome of the two first books, in particular, will be found considerably more entire than in the former editions. The collation of the Venetian manuscript has disappointed us. We expected that the editor would have derived much more advantage from it than he appears to have done. Much depends on the fidelity of the collation, of which it is impossible for us to judge. We hope that a future editor will consider the further inspection of it as unnecessary.

On Professor Schweighæuser's commentary, we have little to remark. By far the larger portion of it consists of extracts from Casaubon, whose animadversions, as we have before observed, ought to have been republished entire. Professor Schweighæuser has made no inconsiderable addition to the mass of information. The least commendable part of the work is the critical observations. The Professor's ignorance of metre, continually exposes him to mistakes of the most ridiculous kind. We recollect, in one place, a dissertation on the quantity of the latter syllable of the particle *ωχι*. The Professor, after mature deliberation, determines it to be long, but is half inclined to believe that the Attic poets occasionally transgress the rule, and make it short!

The Professor promises very copious and correct indexes. In that respect, at least, we hope that he will assume, as he may very easily, a decided superiority over the preceding editors.

ART. XV. An Account of the late Improvements in Galvanism, with a Series of Curious and Interesting Experiments, performed before the Commissioners of the French National Institute, and repeated lately in the Anatomical Theatres of London. By John Aldini, Professor of Experimental Philosophy in the University of Bologna, &c. &c. 4to. pp. 200. London. Cuthell & Martin. 1803.

In general, every new light thrown upon natural knowledge, at first dazzles and confuses: the understanding slowly becomes accustomed to its brightness; and it is only by degrees that the just appearances of the objects of discovery are perceived, and their true relations ascertained. The researches lately made in Galvanic electricity, have afforded to the scientific world many important and interesting results; but the truths that have yet been discovered

discovered by means of them, are few, and, for the most part, insulated. We have already witnessed several attempts to account for the phenomena, and to extend their theoretical applications to physiology and chemistry; but they have appeared to us, for the most part, founded on unsatisfactory suppositions: And the pages we are now examining, afford many new proofs of the vanity of systematizing upon an imperfect series of experiments.

The 'account of the late improvements in Galvanism,' is divided into three parts. The first part is entitled, 'On the Nature and general Properties of Galvanism:' the second relates to the influence of Galvanism on the vital powers: and the third to its medical application. No portion of the work is devoted to historical details concerning the origin and progress of the science; and little notice is taken of the most important discoveries that have been made by means of the electrical pile. M. Aldini, indeed, treats chiefly of his own experiments and opinions.

The celebrated Galvani, who is the author's uncle, in establishing his important discovery, had observed, that muscular contractions were produced, in certain cases, in the limbs of frogs that had been apparently deprived of life, without the aid of metals, merely by bringing certain parts of the animal in contact. His processes were repeated, under new circumstances, by Volta and by Humboldt *: And one of the most simple methods of exhibiting the fact, was found to be the application of the sciatic nerve to the muscles of the leg. M. Aldini has filled the first part of his work with the description of different conditions of this experiment. He has increased the effect, by connecting the nerve and muscle with the parts of warm-blooded animals; and by moistening them with saline solutions. And he infers from the phenomenon, that a peculiar ethereal fluid is continually generated in the animal economy; that it is connected with the functions of life; and that, as there is a *metallic pile*, composed of metals and fluids, so there is likewise an *animal pile*, consisting of living animal substances.

Whilst we admit, that the production of muscular contractions, by the combinations of animal organs, to all appearance dead, is a very curious circumstance, we cannot allow that it affords any proof of the presence of a *peculiar* electricity in living bodies, or that it tends, in the slightest degree, 'to explain the sensations and contractions in the animal machine.' It appears capable of being referred to the general law of the production of electricity, by the agency of conducting bodies on each other; and it may be explained, either by the ingenious hypothesis of Volta concerning

* See Humboldt sur le Galvanisme, pag. 30.

electro-motion, or by the theory of the dependence of Galvanic electricity on chemical changes.

M. Aldini, however, is so perfectly satisfied as to the existence of the ethereal animal fluid, that he employs several propositions in attempting to demonstrate its relations to common electricity, and the electricity produced by metals. His reasonings on this subject appear to us to be very inconclusive indeed ; and we are afraid that he has been mistaken in the results of some of his experiments : As, for instance, when he says, page 21, ‘ that an electrified Leyden phial, introduced under a jar filled with common air in a pneumatic apparatus, occasions a diminution of the elastic fluid ; ’ and when he asserts, page 41, ‘ that opium, cinchona, and other stimulants of a similar kind, which exercise a powerful action on the animal machine, contribute also to excite the action of the pile.’

M. Aldini begins the second part of his work in the following manner :

‘ To conduct an energetic fluid to the general seat of all impressions ; to distribute its influence to the different parts of the nervous and muscular systems ; to continue, revive, and, if I may be allowed the expression, to command the vital powers ; such are the objects of my researches, and such the advantages which I purpose to derive from the action of Galvanism.

‘ The discovery of the Galvanic pile by the celebrated Volta, has served as a guide to enable me to obtain the most interesting results ; and to these I have been conducted by numerous researches and a long series of experiments. I have examined the whole range of nature ; and the grand family of animals has afforded me the means of making observations, highly interesting to physiology, on the whole economy of the vital powers. My experiments on this subject I shall divide into two sections.’ p. 53.

We have looked in vain through the two sections for the important discoveries which the author promises. The experiments detailed in them relate wholly to the contractions produced in the muscles of dead warm-blooded animals, by the application of the electricity of the pile ; and the method of operating is the common one, *i. e.* by making the communication between the nervous and muscular systems. M. Aldini has often performed his processes on the dead human subject ; but the accounts that he gives of his results, are rather disgusting than instructive. He entertains great hopes that Galvanism may be usefully applied in cases of apparent death from suffocation. This part of the subject is really worthy of the attention of enlightened physiologists ; and, as yet, no well-conducted trials have been made in relation to it.

In considering the general medical applications of accumulated Galvanic electricity, M. Aldini displays much more modesty and judgement than in the other parts of his work. He observes—

‘ I am fully convinced that much still remains to be done, in order to discover the best methods of employing this new agent; and that the facts respecting it, though numerous, have not been reduced to principles sufficiently certain and satisfactory. There are, nevertheless, some results and observations exceedingly curious, which, if confirmed by new experiments and researches, may enable us to obtain convincing proofs of its utility. New facts, however surprising, are not to be despised merely on account of their being different from any before observed.’ p. 97. 98.

The author remarks, that the pile of Volta has great advantages over the common electrical machine, as to the permanency and uniformity of its action; and he acquaints us, that a very ingenious apparatus, for the application of Galvanism, has been invented by Mr Cuthbertson.

M. Aldini has made some experiments on the administration of Galvanism to the eyes of persons affected with blindness, but without much success. He asserts, that he has employed it with advantage in some cases of melancholy madness; and he quotes the experiments of the German professors, which are said to have produced extraordinary effects in restoring the sense of hearing.

We are afraid that many of the statements of cures are premature, and that the results require confirmation. It has been proved, we think, by various experiments, and particularly those of Dr Woolaston and Van Marum, that the electricity of the pile differs from the electricity of the electrical machine, chiefly in being of a lower degree of intensity; hence it passes with less facility through imperfect conductors, such as the animal organs; and, consequently, it is difficult to imagine that it can be possessed of greater powers in modifying the vital functions. We refrain, however, from deciding on this point; and we wish that new trials may be made. For the establishment of the efficacy of a new medical agent, an immense accumulation of evidence is required; and accounts of experiments made by enlightened practitioners, would, in some measure, tend to prevent inexperienced persons from employing it as an instrument of quackery.

The anonymous editor of M. Aldini’s work, has added to it a translation of two Latin dissertations on Galvanism, published by the author at Bologna, one in 1793 and the other in 1794, and an appendix, containing an account of some experiments made by M. Aldini on a malefactor executed at Newgate; a detail of experiments of a similar kind made at Bologna; and some observations, which show that Galvanic electricity is capable of par-

sing, with the utmost rapidity, through an extensive chain of conducting bodies.

We shall not offer any remarks upon these additional papers. We have perused them without much interest. They add considerably to the size of the volume, without furnishing any new information. M. Aldini's earlier memoirs contain very little which applies to the present state of the science; and his experiments upon the human body, are of the same kind as those detailed in the second part of his work.

ART. XVI. *Chronicle of Scottish Poetry, from the 13th Century to the Union of the Crowns, with a Glossary.* By J. Sibbald. 4 vol. 8vo. Edinburgh and London. 1802.

THE Chronicle of Scottish Poetry does not contain much which will be new to those who are possessed of the publications made from the Bannatyne MS. by Ramsay and Lord Hailes, together with the ancient Scottish poetry of Pinkerton. A full copy of the works of Sir David Lindsay (excepting only the Four Monarchies), is given from the editions of Charteris and Dr Machabeus. Considering the high reputation which the worthy knight long maintained among the Scottish peasantry, so high as to be chosen in preference to the Bible, as the proverbial standard of truth, and even as the soother of their last moments,* we cannot help thinking an accurate edition of his poems an acceptable present to the public. From his play, the most curious of all his works, Mr Sibbald has only given the scenes contained in the edition 1602, omitting the introduction, interludes, and concluding scenes, which occur in the Bannatyne MS. This omission we greatly disapprove of, as the scenes omitted contain many curious historical documents, as well as a strange picture of manners. It is true, they are interlarded with gross indelicacies, yet not with worse than are to be found in the writings of Dunbar, and many other poems in the Chronicle, nay even in the body of the play itself. Without adopting the systematic defence of indecency set up by one learned editor, we declare ourselves under no apprehension of the public morals suffering from the naked coarseness of an author, who can only be understood by antiquaries. Their ears are, we have been told, like those of confessors;

and

* 'There's not such a word in Davie Lindsay,' is still a proverbial expression of disbelief. 'Hoot awa' wi' your daft nonsense,' said an exasperating man to his pious neighbour, who was reading for his edification a chapter of the Bible, ' bring me Davie Lindsay.'

and if we could banish from the fashionable world the amatory effusions of Mr Thomas Little, we should be little anxious about the ‘ likerous lays’ of father Chaucer, Dunbar, or Lindsay.

Besides the poems of Lindsay, we recognize those of Alexander Hume, author of the Day Estival, which have considerable merit, particularly that on the defeat of the Spanish Armada, although in many places bordering on burlesque. All Dunbar’s poetry is printed from the Bannatyne MS. with great apparent accuracy. Two or three pieces, hitherto unpublished, have been extracted from the same invaluable collection, which, notwithstanding, does, in our opinion, still contain much yet unprinted matter, which Mr Sibbald might have advantageously included in his collection, though at the expence of leaving out or shortening his quotations from Barbour, Blind Harry, and Gawain Douglas, whose works are in every one’s hands. Even such extravagant pieces as ‘ Lich-toun’s Dreme,’ Rowll’s Cursing,’ and ‘ Cowkelbie’s Sow,’ are worthy of being preserved, for the language and manners, though, Heaven knows, the matter is sufficiently contemptible. While we notice these omissions, we may also remark, that the tale, ‘ How a Merchant did his Wyfe betray,’ which, upon Mr Ritson’s authority, Mr Sibbald has inserted in his Chronicle, seems to have no pretensions to be called a Scotch composition. Neither, in Mr Ritson’s copy published from a MS. in the public library at Cambridge, nor from one preserved in the Auchinleck MS. at Edinburgh, can we perceive grounds for this supposition; and, for the northern tone which it has acquired in the Chronicle, it is indebted to the avowed alterations of spelling adopted by Mr Sibbald.

In the third volume of the Chronicle, we find a collection of ‘ Gude and Godly Ballates,’ intended by the composers to supersede ‘ bawdrie and unclean songs.’ This device for edifying the young and gay, by applying sacred words to popular airs, was a favourite experiment of the Reformers. The psalms of Clement Marot were sung by the Huguenots to the air of ‘ Reveillez vous belle endormie;’ and Sternhold undertook his version, that the maids of honour and courtiers might sing them instead of sonnets. ‘ But they did not,’ adds Anthony Wood, with great naïveté, ‘ save but a few.’ Wedderburn, the religious poet of Scotland, carried his inroads into this province of the realm of darkness still farther. He not only adopted the tunes, but, as if the unbecoming association was not sufficiently burlesque, he even parodied the words of the favourite profane airs of their time. Mr Sibbald has published several hymns founded on the popular songs of ‘ Down, belly, downe,’ ‘ The hunt’s up,’ ‘ I’ll never leave thee,’ ‘ Wha’s that at my chamber door,’ ‘ John come kiss me now,’ ‘ N 4

now,' &c. We differ from the learned editor, when he says that the hymn beginning, 'The wind blaws cald,' vol. III. p. 447, is 'doubtless to the tune of "Up in the morning early." On the contrary, we think the measure and inflexion goes much more readily to the tune of 'Drive the cold winter away,' which is much more ancient than is generally believed.

The works of Dunbar, Sir David Lindsay, and other authors, appear to us to have suffered in consequence of the rigid chronological arrangement adopted by Mr Sibbald, in consequence of which they are intermingled with other poems according to their supposed dates; and the reader is consequently deprived of the satisfaction arising from observing the gradual progress of each author in composition.

The notes by which these poems are accompanied are not numerous, nor do they display extensive reading beyond the line of national antiquities; but they are plain, sensible, and generally very accurate. Where elegance has not been attempted, no censure is due, because it has not been attained. The notes of Lord Hailes have been, with a studious veneration, retained by Mr Sibbald, even where he states a contrary opinion. Both commentators appear to us to have fallen into a gross error in attempting to identify John the Reif (or robber) with the famous Johnie Armstrong. John the Reif is mentioned as a hero of popular romance by Gawain Douglas in the *Palice of Honour*, written in 1501, and Armstrong was not executed till 1529. Although Mr Sibbald remarks the former circumstance, he does not contrast it with the latter.

Mr Sibbald differs from Lord Hailes respecting the date of a poem called a General Satire, in this piece, vol. iii. p. 221. The King and Queen are both mentioned; whence Lord Hailes has fixed its date as subsequent to 1538, when James V. was married. Mr Sibbald supposes the reference to be to James IV. and his Queen, and the ballad, of course, to be prior in date to 1513; because he conceives Ingles, to whom the poem is attributed in the Maitland MS., to have been Sir James Inglis, Abbot of Culross, celebrated by Sir David Lindsay, and murdered by the Baron of Tullieallan in 1531, seven years before the date affixed by Lord Hailes. But the miserable state of the country which the satire describes, the allusion to the College of Justice instituted in 1532, and other circumstances of internal evidence, incline us to Lord Hailes's opinion; in which case, the author may have been John Inglis, called by Pitscottie, Marshal. He was an actor by profession, and performed in the plays at the marriage of James IV. (Leland's Collection, vol. iv. 258.). When a young man, he witnessed the famous apparition of St Andrew at Linlithgow. See more particulars of him in Chalmers' *Apology*, p. 617.

Mr Sibbald is widely mistaken in a proposed correction of the following passage in Hardinge's Itinerary :

' Then send a host of footemen in
 At Lammas next through all Lawderdale,
 And Lammermore wode and mossis ouer rin,
 And eke therewith the stowe of Weddale.'

The last place, Mr Sibbald apprehends to be an error of the transcriber, for 'Tweddale,' vol. I. p. last. But it is, in truth, the village of Stowe upon Gala-Water, situated in what was then called Weddale.* The Black Priest of Waddell is one of the three persons entitled to the benefit of the Lauch of Clan M'duff, as mentioned by Winton, B. vi. th. xix.

Mr Sibbald, in a note in vol. I. p. 358, has printed, from Millar and Chapman's Miscellany 1505, an old *jeu d'esprit*, beginning,

' My Gudame was a gay wil, but scho wes right geud ;'
 —which he seems inclined to ascribe to Kennedy. It appears to us, in style and composition, to be very nearly allied to the Fairy tale in the Bannatyne MS. beginning, ' In Tiberius' tyme the trèw Imperatour ;' and also, to another poem of the same whimsical nature, called ' Ane Interlude of the laying of a Gait.' This list appears to have been the composition of James Wedderburn, the eldest of three brothers of that name, who, about the year 1540, composed certain interludes and plays against the Roman Catholic superstitions, which were acted at Dundee; and, in particular, according to Calderwood, he ' counterfeited also the conjuring of a ghailt.' We have no hesitation, from internal evidence, to ascribe the other two poems to the same author.

The poems in the Chronicle are, in general, accurately printed from the original manuscripts. Instances of the contrary may, however, be pointed out, as, in the names of the tunes quoted, Vol. I. p. 379, he gives us, ' Trevass,' for ' Trenass ;' — ' Lemman dwavis it nocht day,' for ' Joly Lemman dwavis it nocth day ;' — ' Our-brâns,' for ' Orliance.' Other instances of minute error might no doubt be pointed out; but the general correctness of the work does credit to the diligence and attention of the editor.

The glossary, by far the most valuable part of the work, occupies

* The etymology seems to be from *we*, *sauus* and *dale*, — the valley through which a river flows. But in Nennius, it is latinized *vallis doloris*, from *wae*, sorrow. In the church of St Mary, at Stowc, is said to have been preserved a piece of the true cross, brought thither by King Arthur, which probably was supposed to sanctify the whole dale. — 3d Gale, p. 114.

pies the fourth volume, contains no less than six thousand words, and may be considered as a very correct dictionary of the Scottish language previous to 1600. There is prefixed, a short essay on the origin of the terms, *Picti*, *Caledonii*, and *Scoti*. Mr Sibbald has abridged, very neatly, the arguments for what has been called the Gothic system of Scottish antiquities. There is added, an hypothesis concerning the name of Edinburgh; and some ingenious remarks upon the rhythm of Saxon and Scottish poetry, with which we were much pleased.

In the glossary itself, Mr Sibbald displays a great advantage over all late glossarists, from his intimate and habitual acquaintance with the Scottish dialect as spoken at present. It is impossible to enumerate the absurd etymologies which have been offered to the public, merely from ignorance in this essential point. We do not mean to say, that the common and vulgar interpretation of a Scottish word is uniformly to be received as its ancient meaning; but the former, although enlarged, restricted, or variously modified, by the course of time, seldom fails to guide us to the latter. To this important requisite, the glossary adds those of respectable learning and indefatigable inquiry, which appear particularly from constant reference to the dialects of the North. Mr Sibbald, a steady adherent, as has been said, to the system of Pinkerton, which derives the Picts from a Gothic root, and supposes them to have transmitted their language to the Lowlands of Scotland, has the following striking remark: ‘The Scottish dialect has a much greater affinity with the Anglo-Saxon, and with the Teutonic or Belgic, than with any of the Scandinavian dialects; and with respect to the two first, it appears, that a cognate word is more readily discovered in the Teutonic dictionary of Kilian, than in the Anglo-Saxon of Leye.’ The latter part of this observation, founded, doubtless, on Mr Sibbald’s experience, will prove a stubborn argument against those who derive the Lowland Scottish dialect from their neighbours of England. Yet, in some instances, Mr Sibbald seems to us to have carried his reluctance to admit an Anglo-Saxon root, a little too far. For example, he derives *sett*, a constitution, from *saett*, Swedish, *modus vel ratio*, which we would rather deduce from the Anglo-Saxon *seht*, *pactum*, *fædus*. In like manner, the editor of the Chronicle is sometimes partial to a Gothic descent. Thus, he inclines to derive *Ketheryns*, Highland banditti, from the Teutonic *Ketter*, *insectator*; whereas, it is the original Gaelic for a troop of soldiers, and was long and generally used under the abbreviated form of Kern, to signify Irish or Highland thieves. See *Derrida, Picture of Ireland, &c.*—The household spirit, called *Brunie*, has no affinity, as the glossary affirms, with the Swedish *Bry*,

Bry, turbare vel vexare, far less with the Saxon *Brynia*, *Ensia*; which, by the way, rather signifies *Galea*. Whatever the primitive may be, the Brounie, from his occupation and habits, may be identified with the Portuni of Gervase of Tilbury. *Otia Imperialia*, p. 960.—*Bensbie*, a kind of spirit, is derived from *Benz* Teutonic, *Diabolus*, and ultimately from *Bann*, excommunicatus; whereas this being, who is still reverenced as the tutelar daemon of ancient Irish families, is of pure Celtic origin, and owes her title to two Gaelic words, *Ben* and *sighcan*, signifying the head or chief of the faeries. *Farifolk*, or *faery folk*, is derived in the glossary from Teut. *bieren*, feriari vel festos dies agere. The French *faerie* is a much more obvious root; which may, perhaps, be ultimately traced to the *peri* of the Persians, or *feri* of the Saracens.—With the same anxiety to find a Teutonic cognate, *fode* is derived from Swed. *fogde*, Teut. *voght*, *voghde*, *prefectus*. But this disagrees with the epithet of *frely fode*, which occurs so frequently in metrical romance, and which proves that the word is a participle or adjective. It is used in many cases where Sibbald's derivation is inapplicable; as, in the romance of Ywain and Gawain, it is introduced as a contemptuous expression:

‘ Sertainly so fals a *fode*
Was never cumen of kingis blode.’

By Winton, and many other rhymers, it is applied to a woman,

‘ Syne Saxon and the Scottis blude
Togyder is in you frely fude.’ *(Queen Maud.)*

In the ancient romance of Hornchilde, a knight calls his son (a youth, not a commander),

‘ Mi childe my oune fode.’

In Sir Tristram, we have it thus spelt;

‘ Nas never non fairer fedde
Than Maiden Blanchflowe.’

We believe it signifies nothing more than ‘ fed,’ or ‘ nurtured:’ Freely fode, will thus mean, ‘ well nurtured.’—*Mulde-mete*, the last meat before death, is explained from *mulken*, Swedish, rotten; whereas, it is simply mold-meat, or food previous to being laid in mold.—A few other instances might be pointed out, in which Mr Sibbald's attachment to a Gothic, and especially a German derivation, has led him to neglect nearer cognates in the Celtic, Anglo-Saxon, and French; but enough of derivations will remain undisputed, to afford no small triumph to the adherents of Pinkerton.

As a specimen of Mr Sibbald's style, of his zeal for the Gothic system, and of the candour with which he states arguments contrary

contrary to his own opinion, we shall transcribe his observations on the letters *qub*, used in ancient Scottish for *ub*, and which is known to be one of the few peculiarities which distinguish the manuscripts of our country from the old English, and, of course, favour the system of those who derive our dialect from a different modification of the Teutonic supposed to have been spoken by the Picts.

The use of *qub*, instead of *ub* or *bw*, is a curious circumstance in Scottish orthography, and seems to be borrowed immediately, or, at first hand, from the Gothic, as written by Ulphilas in the fourth century. In his Gothic Gospels, commonly called the Silver Book, we find about thirty words beginning with a character (*o*, with a point in the centre), the power of which has never been exactly ascertained. Julius, in his glossary to these Gospels, assigned to it the power and place of *qu*. Stiernheim and others have considered it as equivalent to the German, Scandinavian, and Anglo-Saxon *bw*. And, lastly, the learned Ihre, in his Sui-Gothic Glossary, conjectures, that this character did not agree in sound with either of these; but ‘sonum inter *bs* et *qu* medium habuisse videtur.’ Unluckily, he pursues the subject no farther; otherwise, he could scarcely have failed to suggest the Scottish *qub*: particularly as a great proportion of these thirty Gothic words can be translated into Scottish by no other words, but such as begin with these three letters, ex. gr. Goth. *qua* or *bwa*, Scot. *qua*, Goth. *quis* or *h-wis*, Scot. *quahais*, Goth. *quazuh* or *bwazuh*, Scot. *quhafo*, *quhafover*. Goth. *quhatbro* or *bwathbro* (*unde*), Scot. *qubar-frae* or *quhair-thrae*, Goth. *quan* or *bwan*, Scot. *quhan*, Goth. *quar* or *balar*, Scot. *qubar* or *quhair*, Goth. *qudar*, *quathar*, Scot. *qubeder*, *qubeber*; Goth. *queila* or *heveila*, Scot. *qubil* or *quhyle*, Goth. *quileiks* or *hwileiks*, Scot. *qubilk*, Goth. *quhait* or *bwait*, Scot. *qubeat*, Goth. *quet* or *hweit*, Scot. *qubite*. When these Gothic words, therefore, come to be again mentioned, it will be no great innovation upon the authority of Ihre, to adopt some middle sound between the *qu* and *bw*. But, notwithstanding of its striking coincidence with the Scottish *qub*, to avoid any charge of hypothetical partiality, a different element or combination of letters shall be here assumed; viz. *gw*; a sound which appears to furnish an apology for Ulphilas having coined a letter unknown in the Greek and Roman alphabets; a sound, too, which occurs not unfrequently in the ancient language of Germany, ex. gr. *gwairae*, *verus*; *gwallichi*, *potentia*, *gloria* (this word serves in some degree to direct us to the sound, it being also written *cudicbi*); *gwali-bon*, *glorificare*; *gevers*, *symbolum*, *conjectio*; *gwiurtero*, *ignitorum*. What is this harsh sound gave way everywhere to the *bw*, (and, at least in one instance, to *u*), the character which Ulphilas had invented to express it, fell of course to be laid aside. In Scotland alone, the sound was preserved, and appears to this day under the form of *Qub*. —

Glossary, Q.

Mr Sibbald adds the conjecture of a learned friend, who seems inclined to think that the Gothic character under consideration ‘ appears to be the ancient Eolic Digamma aspirated in pronunciation ; ’ and probably thinking that derivation of a pure Gothic letter still too modern, questions whether it may not be derived from the Hebrew *ain*, ‘ the pronunciation of which is, a matter of great dispute.’ If Mr Sibbald had consulted Hickes, with whose labours he seems to have been little acquainted, he would have had the satisfaction of seeing his first conjecture buckler’d by that mighty authority. He says expressly of this Macso-Gothic letter, ‘ sonat ut *hw* Anglo-Saxonum, *wh* Anglorum, vel *qub* Scotorum, in *qubite*, *qubetber*, *qubat*, *qubuy*, *qubiltu*.’ and, in the rules for applying the letters, Hickes observes, that Ulphilas was not the inventor, but the collector and applyer of this sixteenth letter of the Gothic alphabet, which has the powers of an aspirated *o*, as, *ho* or *hoq*. We cannot help thinking, that this aspirated, or rather guttural sound of *qub* Scot. is equivalent to the *gu* of the old English and modern Spanish; as, *guid*, in the former, is indifferently spelt *whelde*; and *agular*, in the latter, is pronounced *awhuilar*. The difference in form betwixt the written *g* and *q*, is very trifling, although the Scots do seem to have been singular in adopting the latter shape. Whether this can, in the penury of early manuscripts, be traced to such antiquity as to authorise the conclusion, that it was derived from a tribe of Goths unconnected with the Saxons, we cannot stop to inquire. The controversy has been maintained with great warmth; we leave it, with the prudent resolution of Dame Quickly—‘ We will not burn our fingers, and need not indeed la ! ’

In the general explanations of Mr Sibbald, a very few inaccuracies occur. *Bole* is explained, ‘ a little armory or closet.’ This is not accurate: it means a deep window or recess formed in the wall. Three different explanations are given of the word *boun*; *borwdin*, *bodin*, *bowyn*, *boun*, furnished, provided, &c. : *boun*, going, moving; and *bouxit*, tended, went. The first of these only is correct. *Boun* means, equipped for war or travel; and *boun*, or *bebouxit*, to a place meant to be prepared to go thither. It is retained in the maritime phrase, ‘ whither bound,’ which does not precisely mean, whither are you sailing, but for what port have you been fitted out. Obliquely, no doubt, the phrase may imply the immediate progressive motion; but this is not its primitive or proper sense. *Cleugh* is not accurately defined, ‘ opposite rugged banks :’ it means, the hollow betwixt such banks; and implies, that such hollow is very narrow. *Swengeour* does not signify, unless by implication, ‘ a stout wencher, or one who roams

recomm' about after the girls ; ' far less is it derived from Teut. *swinn*; *virgo*, from *swinentzen*, vagare ; from Danish, *svangrer*, *gynore* ; from Old English, *swinker*, labourer ; or, finally, from Saxon, *swancan*, labourer. It means only a strong man, or, as the vulgar still say, a *swingeing* fellow, from Mæso-Goth. *swinthesus*, potentia, or *swinth*; *validus*, robustus, as in Ulphilas *gentayida swinthein*, fecit potentiam. *Buttok mail* is too generally explained ' some kind of rent paid to the Church,' since it means, the sum paid to ransom a fornicator from doing penance on the stool of repentance. If *lycane* or *likam* signifies exclusively ' a human body while in life,' (which we greatly doubt), it differs strangely from its cognate *leichnam*, Germ. which means a corpse. *Eschelle* is explained, generally, as ' a particular manner in which the divisions of an army or regiments were disposed.' The word is retained in tactics, and means the oblique movement of a number of divisions. Mr Sibbald, however, knew more about it than the French General of cavalry, who, when desired to march in *eschellan*, answered—' Sacré ! c'est bien pour l'infanterie, mais comment faire monter mes chevaux par une eschelle !' *Bumbard* certainly signifies a cannon, as explained by Mr Sibbald ; but he should have added, that it occasionally signifies a black leather tankard, otherwise called a black jack. Trinculo compares a black cloud to a huge bumbard about to spill its liquor. Indeed, the artillery of the field and table often exchanged epithets, and furnished analogies, perhaps, because the leather cannon, at one time in use, resembled the tankard. In Monsieur Thomas, when Lancelot brags of having broken the butler's head, Sebastian answers,

‘ No, base palliard,
I do remember yet that onslaught ; thou wast beaten
And fledst before the butler, a *black jack*
Playing upon thee furiously : I saw it ;
I saw thee scattered, rogue’ —

Some inconsistencies have also crept into this valuable glossary. Thus, ' *knapscha*' is, in the Chronicle, confounded with ' *knapfack*' ; but, in the glossary, is rightly explained as a distinct word, signifying a steel cap or morion. Some words of difficult interpretation are altogether omitted, as, *yule*, a dwarf ; *wobat*, a hairy caterpillar ; *curle-doddy*, a sort of clover ; *cum paucis aliis*. A pretty large class of omissions might be made up from the ' Adventure of Sir Gawayne ;' but the editor probably thought with us, that, in such alliterative poems, many words are used *rhythmi gratia*, in a very constrained and oblique sense, and some are probably forged ' for the nonce.' Upon some future occasion, we may give the public our sentiments on this head.

In one instance, at least, Mr Sibbald appears to have been a little misled by national partiality. *Tbir*, which is only a contraction of the cockney phrase, *tbeſe here*, is said to ‘have no corresponding English word; as, *tbir* shillings (which I hold concealed in my hand) are better than these upon the table.’ The meaning would be perfectly expressed in English, by saying, ‘*These* shillings are better than *those*.’

Far-strained etymologies of the names of persons and places, afford most amusement to the scorners, and are heedfully to be avoided in this branch of literature. Mr Sibbald, whose judgment seems greatly to have counterbalanced his imagination, affords few openings for mirth, at the expence of his derivations. Nevertheless, as if it were destined that no glossarist, how sober-minded soever, should absolutely resist the temptation which most easily besets them, the editor of the *Scotch Chronicle* has succumbed in one remarkable instance.

‘*Sneddon, Sneddon Castle, Snowden*, an old name of Stirling Castle, and so called by the people in its neighbourhood at this day; as Edinburgh is called *Old Reikie*. William of Worcester, an ancient English historian (about 1440), mentions Striveling, alias Snowden-West-Castle; and, in latter times, Sir David Lindfay gives it the same appellation (see vol. II. p. 95.) The name of Sneddon, or Sneddoun, was probably assumed from the appearance of the rock on which the castle is situated, viz. a *snedden*, or *snodden* rock. See *Sned*, to hew down, or lop off. Sax. *Snidan*, secare, resecare, dolare. *Otfried. Snide*, abscondere, which corresponds exactly with the appearance of the precipice. In the Saxon Chronicle, under the years 922 and 924, the city of Nottingham is called *Snottingham*, originally perhaps *Snodingham*, which, according to the description of the place, seems to be derived from the same kind of origin. This leads to a new etymology of Edinburgh. If Stirling was *Snoden*, or *Snedin-West-Castle*, we may safely presume there was also an *East-Snedin Castle*, i. e. a castle of similar appearance to the eastward of Stirling. And since Nottingham was formerly *Snottingham*, it is not impossible that Edinburgh, in early times, was *Snedinberg*. After undergoing, like Nottingham, the elision of *S*, it might for some time be *Nedinbergh*; and, at this period, the Gaelic name *Dun-Aidan* may have been formed. In the process of time, *Nedenburgh* (*gallicè Dun-Aidan*, or *Dun-Neden*) may have given way to Edinburgh, the initial *N* being omitted, as in the word *adder*, or serpent. Sax. *nedder*. Evis from *nieren renes*.’ Glossary, *vacc* *Sneddon*.

This is the true language of fanciful etymology. It is, in the first place, assumed, that *Snadoun* must mean the *Snadden*, or *Snaded-Down* Castle: 2dly, Because one English historian carelessly describes Stirling by its situation, as *Snadoun-West*: there must have been a *Snadoun-East*, which is mentioned by no histo-

which, whatever it is, is probably Edinburgh, originally called Snadoun, then Neddenburgh, and lastly Edinburgh : of all which unvouched derivations, it is held sufficient evidence, that Nottingham has been changed into Nottingham, a change much for the better. We are inclined to dispute the very ground-work of this derivation, which reminds us of the noted etymology of King Pepin. The word is almost uniformly spelled *Snadoun* or *Snowdon*, not *Sneddon*; neither is the word *burgh*, or *castle* added to it; so, that, according to Mr Sibbald's etymology, the name would consist of an adjective, without a substantive. To make out his argument, Stirling should have been called Snodden-ton, Snodden-don, or Snodden-berg, as well as Edinburgh, to which he ascribes the same derivation. It has generally been supposed, that Snadoun was a borrowed name from Romance, given to Stirling during the solemnization of the rites of chivalry, when the characters assumed by the Kings of Scotland and their courtiers, were those of the Knights of the Round Table. Snowden, a famous name in Wales, was thus, with its fabulous Arthur, transferred to Scotland. A passage in Lindsay, which, we believe, is traditional in the town of Stirling, seems to favour this derivation :

‘ Adew, fair Snadoun ! with thy towris hie,
Thy chapell royal, park, and tabill-round.’

The resemblance of the neighbouring mountains to the description of Snowden, by Trevisa, may have favoured the imposition of this name.

‘ There ben hilles in Snowdonye,
That beh wonderly hye,
With heyghte as grete awaye,
As a man may go a day ;
And hete Erii in Walthe,
Snowy hilles in Englyshe.’

Arthur's Seat, near Edinburgh, probably received its name from some similar circumstance.

If, however, a more ancient etymology be prefixed, Snadoun may mean simply *Snow-town*; for, in winter, the lofty mountains of Perthshire, in the vicinity, may entitle it to that appellation.

But if we cannot agree to Snadoun being rendered Snodden, far less will we allow that Edinburgh was ever called Snoddenburgh. Manifold have been the etymologies proposed to explain the name of our Good Town. Edinburgh has been derived from Edwin, a Saxon monarch, who lived some hundred years after it was known by its present appellation; from Aidan, a Scottish monarch, who, for aught we know, never lived at all; from Edin, Celtic,

Gaelic, the face of a hill ; and from Aidan, British, signifying a wing ; whence, Camden labours to identify it with the Castrum Alatum. Almost any one of these definitions appears to us more plausible, than that of Mr Sibbald. Indeed, if we give credit to the British poet Aneurin, the bard of the splendid song, who flourished in the sixth century, Edinburgh was then inhabited by the Celts ; and consequently its name is not to be derived from *Snidan*, or any other Saxon word. Mynnyzawg, Prince of Edinburgh, commanded the confederate armies of the British chiefs dwelling betwixt the Friths of Forth and Clyde and the Roman wall, and fought the bloody battle of Cattaeth (perhaps Ettrick), in which he sustained a bloody defeat from the Saxons of Deiria, or Northumberland. Three hundred and sixty-three warriors, all of them *Eudorrhawg*, or wearers of the golden chain, marched with Mynnyzawg to this fatal battle : three only survived the conflict ; the bard Aneurin was one of those three ; and his lamentation for the fate of his comrades is still extant. If we look for the etymology of Edinburgh in the British language, which, consistently with this anecdote, we certainly ought, we incline to prefer that which derives the name from Welch, *Edin*, the steep face of a rock ; a compound which occurs in Edimbelly, Edinmore, and other local appellations. When the Saxons acquired possession of the fortress, Dun-Edin of course became Edinburgh ; the former name being still retained by the Highlanders.

The separate appellations of Myned-Agned, or Caer-Agned, rendered into English, Maiden-Castle, and into Latin, *Castrum Puellarum* (*potius Puellæ*), was probably originally conferred, from an idea that it was an impregnable or virgin fortress. This led to the fable of the Pictish Princesses being lodged there. We are surprised it has occurred to no etymologist, that Agned might in time be softened into Aned, and then inverted into Edan.

If the favourers of Mr Sibbald's opinion deny the authority of the Welch bard, the testimony of Saxon historians is not more favourable. The earliest mention of Edinburgh has been detected by the industry of Mr David Macpherson, in the *Annales Ultionenses*, a MS. in the British Museum, where this passage occurs, under A. D. 637, 'Bellum Gline Murefan et Obsessio Edin.' In 960, Eden-town is mentioned in an old MS., quoted by Camden, as being evacuated by the Saxons, and abandoned to Indulf, King of Scots. The place is called Edenesburg, in a charter of Alexander I.; Edwynesburg, in one of David I.; Edenburg and Edinburgh, in the Chronicle of Melrose; Edwinesburgh, by Simon of Durham; Edwynesburgh, in the Chronicle of Lancast.; Edensburgh, by Hemingsford; Edenburgh, in the Polychronicon of Higden; Ednysborg and Edenesburgh, by Knighton; Edyn-

burch, Edynbrough, Maydyn Castle, and the Sorrowful Hill, by the prior of Lochloven; * Dun-Edin, by the Highlanders; and by the Welch, Myned-Agned. Not one of these various readings give the least countenance to Mr Sibbald's conjecture; so that the ~~sign~~, necessary to his hypothesis, must have been cashiered before 937, which is hardly to be admitted.

In the introduction to the Glossary, Mr Sibbald insists, that Edinburgh, or Sneddinburgh, as he will have it, is the same with Abernethy; thus, not only confusing two very opposite sounds, but altogether forgetting that Aber is a Gaelic word, signifying the *mouth*, and cannot consistently be combined with his Saxon Sneddan, or Snodden. This reminds us of an ingenuous gentleman, who derived the etymology of Stobo from a Latin and French word, *Ste-beau*, I stand fair. But enough of the only conjecture in this, valuable lexicon, which can be termed overstrained and whimsical.

Our limits do not permit us to bestow any further criticism upon Mr. Sibbald's Glossary, which we consider as a very important national acquisition. The Chronicle itself contains little that may not be found in the libraries of most antiquaries; but all such libraries will, in futrre, be imperfect, without this Glossary. The few errors which occur, are such as the most sedulous attention could hardly have avoided; and while it is our duty to remark them, we cannot but regret, that these points of discussion are now indifferent to the author. †

To him, what matters it,
What Hingest utter'd, or how Horfa writ?

We are no great admirers of fashionable printing, hot-press work, or cream-coloured paper, yet we could have wished that this useful book had been executed in something of a better style. We do not say, that it is inaccurately printed; and certainly, as was recommended by Lord Chesterfield to George Faulknor, the paper is somewhat *whitish*, and the ink rather *blackish*; but a Chronicle of National Poetry should not be printed quite like the Cheap Repository, or the Pilgrim's Progress. The paper is of so inferior a quality, as not to stand the press; so that most copies we have seen, are much damaged and torn; besides which, the printers or booksellers devils, entertaining probably little respect for the external appearance of Mr. Sibbald's labours, have folded the sheets with cruel inaccuracy. These are evils which require to be checked where they occur, as much as the opposite extreme of absurd and expensive decoration.

ART.

* Wynton confounds Edinburgh with Alclayd, or Dumbarton.
† Mr. Sibbald died soon after the publication of this collection.

ART. XVII. *The Political and Confidential Correspondence of Lewis the Sixteenth: with Observations on each Letter.* By Helen Maria Williams. 3 vol. 8vo. London: G. & J. Robinson, 1803.

WHOMEVER reads this striking title-page, will immediately be disposed to ask some questions, as to the authenticity and genuineness of the letters. But, in a particular of such indispensable importance, the editor has not thought fit; perhaps had it not in her power, to satisfy the just curiosity of the public. The story she tells in the preface is imperfect, and is told very foolishly. We are given to understand, in the way of allusion and hints, which were probably thought more elegant than a plain statement, that a French edition of these papers was prepared for the press by certain friends of the late King: that this publication would have consisted of two volumes, one containing his Majesty's private letters, the other his compositions on public and general subjects: that, in the preface of this intended edition, it was stated that the originals 'are deposited in the hands of a personage who will think it a pleasure and a duty to communicate them to such as are curious or incredulous'; that this statement is true: that the French publication has been deferred, and the manuscript volumes have fallen into the hands of Miss Helen Maria Williams—but by what means, she says, 'it is unnecessary to mention': finally, that she has obtained 'such proofs from men who now fill eminent offices under the republic, and from others who exercised the highest functions under Lewis the Sixteenth, and who were consequently instructed both as to the spirit and the letter, as leave no doubt whatever with respect to the authenticity of these papers.' There is nothing very improbable in any part of this story; but no part of it is here proved. In its present shape, it does not wear the slightest semblance of evidence. The public can never yield an entire credit to these volumes, until it shall receive information, in what manner the originals, if such really exist, have been preserved and collected. The literary manuscripts of Lewis probably remained in his own possession, until his private property was plundered; and then must have fallen into the hands of persons who were not likely to yield them up to the lurking or emigrant friends of the murdered Monarch. Most of the private letters now published were written under such circumstances of agitation and emergency, that copies would hardly be retained at the time; and several of them are addressed, in terms of reproach, to a personage, whom, if he has voluntarily surrendered them to the public eye, we must at once believe to have merited those severe reproofs, or to be actuated at least by such heresies, as to devote his own character

to the consecration of his Sovereign's fame. It is impossible, therefore, that we should feel ourselves completely satisfied with regard to these papers, until their progress and transmission has been faithfully traced from the closet of Lewis to the hands of the present possessor. The name of that person, too, the public is entitled to require, as well as the means by which the editor contrived to obtain copies. The manner in which her preface is written, implies an unwilling confession, that *she* has never seen the originals; nor should we, indeed, have been liable to take it for granted, that a communication of such importance would be made to a foreign refugee authoress, whose reputation in her own country has scarcely reached beyond the customers of the circulating libraries. From all these considerations, we do not hesitate to say, that the letters, at present before us, as manuscripts of Lewis, appear without any *external* evidence of that allegation, and without a single circumstance in the manner of publication, that, independently of the letters themselves, can inspire confidence in their authenticity.

Notwithstanding this dissatisfaction with the manner in which they are introduced to the public, we shall venture, without any consciousness of inconsistency, to express our persuasion, that the letters, at least most of them, *are genuine*. We owe this belief to the impressions of internal evidence. In their general manner and turn of expression, they bear a sufficient resemblance to the writings which have long been known as the avowed or ascertained compositions of Lewis; while the sentiments that predominate, and give a character and consistency to the correspondence, accord with that benevolent, but unresisting temper, which is ascribed to the King by all who had opportunities of observing him, and which is established by the uniform tenor of his conduct. He shows here all his amiable weaknesses, and his many estimable virtues. The plainness, too, of the diction in most of the letters, is altogether different from the finery and flippancy that prevail among French writers of the present school; and there are many touches of that just pathos and dignified emotion, which is natural only to a good man, in the anguish of unmerited suffering, amid the wrecks of external grandeur. To the weight of this internal evidence, we do not choose to disguise that we have admitted a strong confirmation, from presumptions of a more indirect nature. We cannot believe, that the editor of the present publication would descend to assist any forgery, by which the reputation of Lewis the Sixteenth would be heightened, and his memory endeared. On the contrary, she maintains, throughout her observations, a malignant struggle against the conviction that these letters cannot fail to impress on every well-regulated mind.

mind. A person may be capable of irrational, unfeeling, incurable bigotry, who would not be guilty of a direct fabrication; and a fanatic, who has taken up the trade of authorship, though not likely to invent proofs destructive of the favourite creed, might yet find it convenient to gratify the curiosity of the public, reserving a happy self-justification in the idea of repelling all this evidence, by the force of an eloquent and ingenious commentary. Our application of this presumption to the present instance may at first be suspected of harshness: by some courteous and gentle readers, perhaps, will be deemed ungallant. But, in an offence against generosity, and all humane feelings, we cannot permit that consideration of sex, which aggravates the delinquency, to soften the punishment. Nor will our severity appear extreme to any, who shall labour, as we have painfully done, through the large portion of these volumes, of which Miss Williams claims the demerit.

Our readers must be anxious to peruse some of the letters; and we are no less impatient to quit, for such interesting objects, the irksome and humiliating task of exposing imposture, and chastising conceited dullness. But no part of our duty may be dispensed with. The three volumes, now in our hands, furnish a most reprehensible specimen of what is called book-making. All the original materials might have been contained in a very small volume; but the article (so it will be called in Paternoster-Row) is made up by a translation of all the letters, and by a long commentary on each. The style of the translation, and the temper, as well as the materials of the commentary, are defects of a different kind, which we shall presently notice. But this method of adulterating their wares, of affording unmerchantable commodities with those of necessary demand, of making out a large bulk by a mixture of rubbish, is an imposition practised upon the public by the literary tradesmen, and ought to be repressed, if possible, by literary police. The translation is superfluous to those, who have access to the original; the original is useless to those, who must remain content with a translation; and the commentary, we are satisfied, will not be perused by either the one or the other. For the accommodation of the public, we hope some bookseller will undertake a correct edition of the originals alone.

We have submitted to compare the translation of Miss Williams, with a great many of the original letters; and our opinion is, that it is executed very inadequately, and betrays frequent marks of carelessness. The peculiar merits of the King's style are lost, and the character of his composition almost obliterated: in place of a natural expression, which varies with the feelings of the writer, and rises above its usual plainness, with-

out effort, into dignity or tenderness, we see for ever the tawdry beauty and the chilling affectation of Miss Helen Maria Willing. In a letter of the 26. August, 1789, Lewis has described with a just conciseness of metaphor, the state of his public feelings; ‘en ne me livrant point à cet enthousiasme qui s'est emparé de tous les ordres, mais qui ne fait que glisser sur mon ame,’ instead of which the English reader is to be sickened with ‘the torrent of enthusiasm which hurries on all the different orders of the state, but which only glides lightly over the surface of my soul.’ The picturesque word *torrent* is an especial favourite with this compiler of novels, who has presumed to transcribe the sorrows of the last of the Bourbons: ‘Sans moyens répressifs,’ (he flaments, at a more disastrous period to the old Duc de Polignac), ‘Sans moyens répressifs, je fais seul tête à l'orage; mais cela peut-il durer long-tems?’ which is thus debafed, ‘without any means of repression, I stem alone the stormy torrent; but can I long resist?’ Again, ‘la tourmente révolutionnaire a troublé toutes les têtes,’ is rendered, ‘the revolutionary torrent has dizzied every brain;’ which makes nonsense of a correct image. In the course of some pleasing thoughts relative to the education of the Dauphin, Pervis exclaims, ‘La gloire militaire tourne la tête; eh! quelle gloire, que celle qui regarde des flots de sang humain, et ravage l'univers;’ ‘military glory, (we have it again) dizzies the brain; and what species of glory is that which rolls its eye over streams of human blood,’ &c. The most easy passages are sometimes rendered with such slovenly negligence, that the very tone of the English language is lost as much as the elegance of the original. Of this, the following is a sufficient specimen: The sentence occurs in a letter to Malesherbes, which we shall afterwards give at full length,

‘Vous balancâtes long-tems à venir respirer, à ma cour, un air qui convenait peu à la touchante simplicité de vos mœurs; mais Turgot vous fit entendre qu'il ne pouvait pas, sans vous, opérer un bien durable; il vous décida; et je l'en estimai d'avantage.’ Vol. I. p. 43.

‘You long balanced whether you should come, and breathe the air of my court, so ill in sympathy with the interesting simplicity of your manners. Turgot made you understand, that, without your aid, he could operate no durable good; he determined you: and I esteemed him the more.’ Vol. I. p. 49.

The general character of the translation is, that it is meanly literal. ‘l'université des François,’ and ‘l'imperturbabilité,’ must be bad phrases in any dialect; they are not rendered in French, because they are not very unusual; but the literal translation of them into English is inexcusable. We have sometimes still worse; the speech of an oration of the legislative body,

body,' and of 'those princes who have despoiled the earth.' So much for her acquaintance with the language of her original country; still more proofs might be collected to shew, that she is not yet naturalized to that of her adopted republic. For instance, 'de bonne heure,' is translated *often*; 'blanchisseur,' 'whitewasher'; 'rapprochement,' which is used by the King in allusion to a projected coalition or reconciliation of parties, becomes in her version '*approximation*'; the King says to Malestroit, 'vous êtes, si vous me permettez de le dire, un peu égoliste dans votre vertu,' a delicate and complimentary reproof, by which he urges his request that the patriotic minister would still remain in his service, but which the translator, with rare ignorance of language and of sense, converts into coarse and absurd abuse, 'you are, permit me to tell you, somewhat an *egotist* in your virtue.'

As she has contrived, even under the controul of an original text, to patch on so much unbecoming ornament, we may of course expect, in the free range of her own composition, to find her flaunting in all the colours and flowers that she can collect. We have 'lights beaming from every point of the mental horizon,' and are told of 'a phalanx disciplined against the eruption of research and philosophy.' Though we are once permitted to 'look back through the troublous vista of the revolution,' yet we are from time to time reminded of 'our regenerated days;' one is apt indeed occasionally to forget them. In a long and senseless dissertation which she introduces, our readers will wonder why or how, on the politics of Virgil and his ivory-gate, we are informed that that poet 'sometimes threw out his republican soul athwart the cuirassed breastplate of the courtier.' Besides these pictures, which are evidently all her own, she finishes sometimes the sketches that have been left imperfect by older masters, Bosquet, for example, and Burke. The Bishop of Meaux had declared, with considerable truth and much bigotry, that modern infidelity was a detestable shoot from the fatal stock planted in the sixteenth century, by the leaders of the reformation: 'it will be found,' (says Miss Williams), 'on a closer examination, to have been rather an offset from the mysterious and monstrous trunk of papal absurdity.' She is still more happy in another attempt of the same kind.

'It was at this period that the queen, who, "like a morning star, had just appeared on our horizon," (to borrow the elegant phraseology of the orator), "full of life, and splendour, and joy," found every beam refracted, when shot into the political mist.' Once or twice she is somewhat playful and lightsome in her composition. The exiled tyrant of Syracuse is familiarly called Denys; and a comparison of somebody to Caesar, for the purpose of saying

ing there was no resemblance, ends with 'let us beg pardon of the shade of Cæsar.' The most striking effort of her gaiety is directed against chemistry, in a passage which equally displays her science and her fine-writing. In a billet addressed to Lavoisier, the King congratulates him on a recent discovery, and requests him to repeat the experiment in his presence: even this billet is not suffered to pass without a commentary, of which the following passage is only a part:

'The experiments, which this celebrated philosopher is here invited to repeat before the King and his family, form the basis of the French system of chemistry. But, although they met with the royal approbation, and since with the adherence of almost the whole of the chemical world, this system yet wants the sanction of that illustrious experimentalist who first laid the foundation on which this aerial superstructure is reared.'

'But leaving the fate of these *gases* to the impartial investigation of the scientific world, who can help deplored that of M. Lavoisier, and hearing a groan of execration against his hideous murderers!' Vol. I. p. 187.

Throughout all these comments, we have the same contempt of anglicism as in the translation. We have 'imperturbability' again, and 'demoralisation.' The flight to Varennes is always styled the 'evasion from Paris.' We find that 'Turgot enacted the spy of the court of France;' that Maurepas 'gained the ambitioned ascendancy over the monarch;' and that by some other ministers, the 'reputation' of some old taxes 'was duly rehabilitated.' Then we hear of 'a mind of no very elevated texture,' and of 'the slight texture of moral courage.' Lewis is censured for having 'treated geometers and metaphysicians with misprision.' And we are made to pronounce, if we can, 'a new impulsion of patriotism,' 'civil disruptions,' 'lugubrious images of the future,' and 'much irreverential demur respecting rights and privileges.'

Half of the first volume is occupied with letters addressed by Lewis, in the earliest years of his reign, to his different ministers; the best of these are to Malesherbes, on whose character he seems always to have reposed with unabated confidence and affectionate admiration. This part of the correspondence throws some light on the successive changes of administration; in all of which, though the King was sometimes necessitated to yield, he displays an excellent judgment of public affairs, and appears to have been actuated by the purest love of his people. Such of these letters as were written to Malesherbes, are rendered more highly interesting, by giving us a view of objects placed, as it were, under the first light and dawn of the Revolution. We are made to feel the gradual brightening of that day, which has since been overcast by so foul a storm. Even at that early period,

with a singularity of sentiments no less honourable to his patriotism than to his sagacity, Lewis seems ready to share the hopes and the enthusiasm of enlightened reformers, while he trembles with solicitude for the unknown consequences of precipitate innovation. From the 14th July 1789, and the inglorious emigration of princes and courtiers which immediately followed that memorable era, we trace all the feelings of the King, as they varied from day to day, and as he has expressed them, with no common powers of pathos, to his relations who had deserted him, to the revolutionary leaders, and to his friend (he possessed but one) the aged and venerable Malesherbes. This journal of his protracted sorrows closes with the letter in which he accepts the heroic offer of that friend to appear with him at the bar of the Convention. The editor has subjoined a few other letters, not found in the manuscript of the intended French publication, but confided to her (as she says) by indisputable authority; these, if genuine, prove that Breteuil conducted his negotiations for foreign aid or mediation, under the sanction of the King. The other papers, added to this collection of letters, are—Instructions addressed by Lewis to the person whom he had intrusted with the Dauphin's education; detached maxims on miscellaneous topics, some original, some extracted; and notes, that were found in the handwriting of the King, on the margin of several important state papers. These last will be deemed valuable, not only as illustrative of his personal character, but because they are connected with the history of some great political transactions. The state papers, to which these remarks relate, are—Turgot's scheme of municipalities, the manifesto of the French court in the American war, and Necker's memoir on provincial administrations.

We shall now gratify our readers with a considerable number of extracts; beginning with the letters addressed, in the year 1776, to Malesherbes and Turgot. With respect to the first of these, it is proper to notice that the editor speaks of its having been communicated to her by Malesherbes himself.

“ A M. DE MALESHERBES.

“ Versailles, 17. Avril, 1776.

“ Je n'ai pu vous exprimer assez dans notre dernier entretien, mon cher Malesherbes, tout le déplaisir que me causait votre résolution bie^{re} prononcée de vous démettre de votre ministère. Maintenant que j'ai réfléchi avec quelque maturité sur cet objet, je vais vous ouvrir mon cœur; et je transmets mes idées sur le papier, pour qu'elles ne s'échappent point de ma mémoire.

“ Entouré comme je le suis d'hommes qui ont intérêt à égarer mes principes, à empêcher que l'opinion publique ne parvienne jusqu'à moi, il est de la plus haute importance pour la prospérité de mon règne que

mes

même pour des tems en tems se reposez avec satisfaction sur quelques suggestions mon choix, que je puisse appeler les amis de mon cœur, et qui m'avertissent de mes erreurs, avant qu'elles aient influé sur la destinée de vingt quatre millions d'hommes.

* Vous êtes, avec le sage de Maurepas, et l'intrépide Turgot, l'homme de mon royaume qui avez le plus de titres à ma confiance; et il ne faut pas faire entendre à nos ennemis communs que vous êtes sur le point de la perdre lorsque vous ne l'avez jamais plus méritée.

* Lorsque Maurepas m'eut présenté votre nom comme un de ceux qui étaient le plus faits pour donner du poids à mes projets de bienfaisance, j'étudiai en silence votre vie publique et privée; et je vis que je serais peut-être plus heureux de vous offrir une grande place, que vous de la recevoir.

* Ma cour des aides était, avant votre première présidence, une compagnie assez mal organisée, qui se laissait soudoyer par les financiers dont on lui avait donné la surveillance. Jamais un contrôleur général ne la trouvait en opposition, quand il lui présentait des édits bursaux odieux : Vous êtes venu, mon cher Malesherbes ; vous avez purgé ce corps des membres qui le déshonoraient ; et, d'après son institution primitive, il est devenue l'asyle de l'indigent et de l'opprimé.

* La nature vous avait donné une ame citoyenne ; et vous l'avez transférée à votre cour des aides : du moins j'en juge par les remontrances vigoureuses que vous lui avez dictées, et que j'ai placées, dans ma bibliothèque choisie, entre les Catilinaires de Ciceron et les Philippiques de Demosthenes. Je ne suis pas encore bien sûr qu'il soit utile de jeter des maximes si philosophiques au travers d'une constitution monarchique, que sont de mécontents ont intérêt à ébranler : mais vos remontrances respiraient le bien-public ; elles m'éclairaient sur des désordres que ma cour et mes ministres conspiraient à me cacher ; et je ne les ai considérées que sous ce point de vue. Alors, malgré quelques principes qui ne pouvaient avoir mon assentiment, j'ai applaudi intérieurement à votre courage, et j'ai senti que vous aviez des droits à ma reconnaissance.

* Nos entrevues, où Maurepas était en tiers pour nous juger tous deux, ajoutèrent à mon estime ; et je vous donnai le département de ma maison, vacant par la démission de la Vrillière. Vous balancâtes long-tems à venir respirer, à ma cour, un air qui convenait peu à la touchante simplicité de vos mœurs ; mais Turgot vous fit entendre qu'il ne pouvait pas, sans vous, opérer un bien durable : il vous décida ; et je l'en remercie d'avantage.

* Vous avez commencé votre ministère avec une vigueur qui ne concordait pas mes principes. On se plaignait des lettres de cachet dont votre prédécesseur disposait au gré de ses favoris ; et vous avez refusé d'en faire usage. La Bastille regorgeait de prisonniers, qui, après plusieurs années de détention, ignoraient quelquefois leurs crimes ; et nous avons rendu à la liberté tous les hommes à qui on ne reprochait que d'avoir été au service de ces ministres en faveur, et tous les coupables qui avaient été trop puissants.

* Vous

‘ Vous avez entrepris des réformes utiles dans ma maison militaire ; mais bien des gens ont conçu des alarmes ; je devais appréhender que le mécontentement n’entraînât des troubles partis à ceux de la Ligue et de la Fronde ; et alors j’ai été obligé de renvoyer à des tems plus heureux le moment si cher à mon cœur, où, bannissant une vain pompe, je n’aurai plus d’autre maison que les hommes de bien, tels que vous, qui m’entourent, et, pour garde, les cœurs des Français.’

‘ C’est dans cette circonstance orageuse, mon cher Malesherbes, que vous me demandez votre retraite ! Non, je ne vous l’accorderai pas : vous êtes trop nécessaire à mon service : et, quand vous aurez là cette lettre en entier, je connais assez votre ame sensible, pour croire que vous cesserez de me le demander.’

‘ D’ailleurs, ce n’est pas au moment que vous êtes obligé de céder aux circonstances, qu’il convient que vous donniez votre démission. La cour vous croirait en disgrâce ; et ce mot, quand il s’agit d’un sujet aussi recommandable que vous, ne doit jamais m’échapper.’

‘ Je vous attends demain chez Maurepas. Comptez sur mon estime, et sur ma Amitié. Louis.

‘ A M. TURGOT.

‘ Ce 15 Avril, 1776.

‘ Votre administration bienfaisante, mon cher Turgot, vous fait honneur : elle obtient l’approbation de tous les Français. Vos vues grandes et sages, le bien que vous opérez, les services que vous me rendez, ne sauraient s’oublier : ils sont gravés dans ma mémoire, et encore plus dans mon cœur. Que cette lettre soit pour vous un témoignage de la satisfaction de votre roi, et de votre ami. Continuez de faire le bonheur des Français ; et vous ferez cela d’un roi qui ne veut être que le père de ses sujets. J’ai lu votre mémoire : il est rempli de vues sages et utiles ; mais je crains que ce ne soit là encore le rêve d’un homme de bien. Nous le méditons ensemble ; et peut-être que par ce moyen nous pourrons réparer bien des maux, et amener d’utiles changemens. Adieu. Louis.

‘ A M. DE MALESHERBES.

‘ Versailles, 2 Mai, 1776.

‘ Turgot, mon cher Malesherbes, ne convient plus à la place qu’il occupe : il est trop entier, même dans le bien qu’il croit faire. Le despotisme, à ce que je vois, n’est bon à rien, dût-il forcer un grand peuple à être heureux. Le parlement, la noblesse, Maurepas surtout, qui m’aime véritablement, demandent sa retraite ; et je viens de la figer. Je ne vois pas pourquoi cet acte de rigueur, nécessaire à la tranquillité publique entraînerait votre démission : vous avez les talents de Turgot, mais non l’alérité de son caractère ; vous êtes tolérant, sans être faible ; et le bien que vous desesperez de faire aujourd’hui, vous avez la sagesse de le renvoyer au lendemain.

‘ Restez au ministère, mon cher Malesherbes. Votre franchise m’dit nécessaire encore ; et vous la devez à votre roi, si vous ne la devez pas à votre roi. Louis.

' A M. DE MALESHERBES.

' Versailles, 7 Mai, 1776.

' Votre obstination m'afflige singulièrement, mon cher Malesherbes. Sully ne quittait point Henry IV., quand ce prince avait besoin de ses lumières. Vous êtes, si vous me permettez de le dire, un peu égoïste dans votre vertu.

' Enfin vous voulez votre retraite ; et je vous l'accorde. Voyagez donc, puisque vous avez besoin de voir d'autres contrées que celle qui vous regarde, et que vous pouvez rendre heureuse.

' A votre retour, venez me voir, comme à l'ordinaire, et m'entretenir avec la même intimité. Mon visage, à cette époque, ne sera pas plus changé que mon cœur ; et n'ayant que de l'estime l'un pour l'autre, nous n'aurons pas besoin de nous réconcilier.

Louis.

In these admirable letters, no circumstance is more remarkable, than the accuracy with which the King appreciates the character of Turgot. The enlightened principles and profound views of that illustrious man, are acknowledged with unfeigned admiration ; nor does Lewis appear to have been less qualified to comprehend their extent, than to discern the difficulties of their immediate accomplishment. Perfectly disposed to second his minister in all designs of attainable reform, he was better aware of those practical maxims of innovation, which, while they seem to setter the impatient benevolence of individuals, give steadiness and maturity to the real progress of political improvements. In this important art of accommodating abstract principles to such circumstances as cannot be controlled,—in the great legislative talent of compromising the perfection that is conceivable, for the good which lies within our reach, the character of Turgot was unquestionably defective ; and the regret which Lewis has expressed on that account, was felt at the time by the most enlightened friends of liberty in Britain as well as in France, and, after a mournful confirmation from experience, is now still more keenly felt by such of their posterity as inherit that generous sentiment. In that number, notwithstanding very anxious pretensions, the editor of this publication can scarcely be classed. Among the remarks on these letters, we have indeed some tedious ranting about Turgot ; but his real merit, she has evidently no capacity to discriminate. It is entertaining enough to observe this unqualified panegyrist of the Intendant of Limoges, when she has occasion to mention the murder of Berthier, profess her implicit belief in the witchcraft of foretelling and regrating.

Another letter, written to Malesherbes almost upon the eve of the Revolution, is very curious. It displays the conscientious embarrassment of the King, between his speculative conviction of the utility of a free press, and his alarm at the violent fever which he saw spreading by irresistible contagion among his people.

Unprepared

Unprepared for political discussion by the habits of gradually diffused knowledge, that people had been exposed suddenly to the assault of enthusiastic and indefatigable demagogues, who, for the attainment of a noble end, scrupled not to inflame all the violent and licentious passions of the multitude. The prophetic touches, in which Lewis anticipates the disasters that awaited him and his beloved France, are rendered more affecting by the confession, that there had been a period in his own life when his candid mind was unable to withstand the seductive speculations of Diderot and Rousseau.

* A M. DE MALESHERBES.

* 13. Dec. 1786.

‘ J'aime et j'estime les hommes, mon cher Malesherbes, qui, par des ouvrages utiles, prouvent qu'ils font un sage emploi de leurs lumières : mais je n'encouragerai jamais, par aucun bienfait particulier, les productions qui tendent à la démoralisation générale. Voltaire, Rousseau, Diderot, et leurs pareils, qui un instant ont obtenu mon admiration, que j'ai su priser depuis, ont perverti la jeunesse qui lit avec ivresse, et la classe la plus nombreuse des hommes qui lisent sans reflexion. Sans doute, mon cher Malesherbes, la liberté de la presse agrandit la sphère des connaissances humaines. Sans doute il est à désirer que les gens de lettres puissent manifester leurs pensées sans licenciement d'une censure quelconque : mais les hommes sont toujours si au delà du point où la sagesse devrait les arrêter, qu'il faut non seulement une police sévère pour les livres, mais encore une surveillance active envers ceux qui sont chargés de les examiner, pour que les mauvais livres aient le moins de publicité possible. Je le fais, toute inquisition est odieuse : mais il faut un frein à la licence ; car, sans ce moyen, la religion et les mœurs perdraient bientôt de leur pouvoir, et la puissance royale de ce respect dont elle doit être toujours environnée. Nos philosophes modernes n'ont exalté les biensfaits de la liberté, que pour jeter avec plus d'adresse dans les esprits des semences de rébellion. Prenez y garde : nous aurons peut-être un jour à nous reprocher un peu trop d'indulgence pour les philosophes, et pour leurs opinions. Je crains qu'ils ne séduisent la jeunesse, et qu'ils ne préparent bien des troubles à cette génération qui les protège. Les remontrances du clergé sont en partie fondées : je ne puis qu'applaudir à sa prévoyance. Vous avez promis en mon nom, dans l'assemblée du clergé, de poursuivre les mauvais livres, les livres impies. Nous tiendrons notre promesse, parceque la philosophie trop audacieuse du siècle a une arrière pensée, qu'elle corrompt la jeunesse, et tend à tout troubler, et à tout diviser.

Louis.

We shall introduce the two following letters, without any particular explanation. They are deeply affecting, and raise a variety of emotions. But we are disarmed by the spectacle, so near us, of ruined greatness; and when our country has been chosen as the last refuge of misfortune, we will not violate the most sacred of the laws of hospitality.

* Av

* AU COMTE D'ARTOIS.

MON FRERE,

7. Septembre, 1789.

“ Vous vous plaignez ; et votre lettre, où le respect et l'amour fraternel guident votre plume, contient des reproches que vous croyez fondés. Vous parlez de courage, de résistance aux projets des factieux, de volonté. . . . Mon frère, vous n'êtes pas roi ! Le ciel, en me plaçant sur le trône, m'a donné un cœur sensible, les sentiments d'un bon père. Tous les Français sont mes enfants ; je suis le père commun de la grande famille confiée à mes soins. L'ingratitude, la haine, arment contre moi ; mais les yeux sont obscurcis ; les esprits sont égarés ; la tourmente révolutionnaire a troublé toutes les têtes. Le peuple croit s'intéresser à sa propre cause ; et c'est moi seul que j'aurais pu défendre. Je pourrais donner le signal du combat ; mais quel combat horrible ! et quelle victoire plus horrible encore ! Pouvez-vous croire que j'eusse triomphé, au moment où tous les ordres de l'état se réunissaient, où tout ce peuple s'armait contre moi, où toute l'armée oubliait ses serments, l'honneur, et son roi ? J'aurais donné, il est vrai, le signal du carnage ; et des milliers de Français auraient été immolés. . . . Mais vous direz peut-être, le peuple a triomphé ; il vous a prouvé par ses excès que ses sentiments n'étaient pas si généreux, qu'il osait abuser de la victoire, et poignarder son ennemi vaincu.—Ah ! ne comptez-vous pour rien le calme d'une bonne conscience ? J'ai fait mon devoir ; at, tandis que l'assassin est déchiré par les remords, je puis dire hautement, je ne suis pas responsable du sang versé ; je n'ai point ordonné le meurtre ; j'ai sauvé des Français ; j'ai sauvé ma famille, mes amis, tout mon peuple ; j'ai la conscience intime d'avoir fait le bien : mes ennemis ont eu recours aux forfaits. Quel est celui d'entre nous dont le sort est le plus digne d'envie ? Cessez, mon frère, cessez de m'accuser : le temps, les circonstances, et mille causes qu'il serait trop long de détailler, ont fait les malheurs de la France. *Il est trop cruel de me les reprocher.* C'est se joindre alors à mes ennemis, et déchirer ce cœur paternel. Mon frère, je me suis sacrifié pour mon peuple : foyez persuadé que, ce premier devoir rempli, je saurai me sacrifier pour vous et pour les Français qui vous ont suivi. Déjà votre éloignement excite des murmures ; déjà les factieux se promettent bien de nous accuser, et de tirer parti de cette démarche, qu'ils appellent en ce moment une fuite, une conspiration, un attentat. Ces idées se propagent ; elles produiront de funestes résultats, si la tranquillité n'est point retrouvée ; si votre rappel devient impossible ; si je néglige l'occasion favorable de rappeler en France les Français exilés volontairement, et qui doivent s'empresser d'obéir au vœu que je me ferai alors un devoir de manifester. Adieu, mon frère ! n'oubliez pas que je vous aime, et que je m'occupe de vous.

LOUIS.

* A M. LE COMTE D'ARTOIS.

MON FRERE,

20 Mars, 1792.

“ Les gentilshommes qui vous ont suivi, et qui pour nous ont abandonné leur patrie, se plaignent amèrement. Ils ont tout quitté pour l'honneur, pour défendre le trône et l'autel. (Il ne s'agit pas de savoir si vous et eux avez fâtement agi : souvent je vous ai attristé, en vous portant

portant mes plaintes à ce sujet). Leur sacrifice est d'autant plus méritoire, que, délaissés, exilés, pour ainsi dire, dans le fonds des provinces, les biensfaits de la cour venaient rarement les chercher, et que leur patrimoine n'en était pas moins consacré à la défense de l'état. Les gentilshommes se plaignent qu'ils sont maltraités par la haute noblesse, qui daigne à peine les regarder, et ne veut voir en eux que des inférieurs. Cependant le dévouement de cette classe de la noblesse me paraît digne d'éloges. Quel fut son intérêt en embrassant la cause des princes exilés? Il n'en fut point pour elle; et cependant elle prend les armes, se prépare au combat, tandis que ceux qui feignent de les mépriser semblent n'avoir fui que pour se soustraire au danger. Mon frère, ayez des égards pour ces braves Français, qui se sont dévoués; et ne souffrez pas qu'ils soient avilis. Dites leur, que toute ma noblesse m'est chère, et que je porte tous les Français dans mon cœur. Ah! je souffre trop de votre absence, pour ne pas gémir de cet exil qui me laisse à la merci de mes ennemis, qui me fait envisager, pour ma noblesse, et les princes de mon sang, les plus grands malheurs. Oh! dites souvent aux Français, malgré mon vœu, malgré mes ordres, reunis sur les bords du Rhin, que j'ai perdu toute espérance; qu'il m'est impossible de terrasser l'hydre des discordes, de réconcilier les esprits, de ramener la paix intérieure; mais que, dans les grands dangers qui m'environnent, il me reste encore une ressource, celle de favorir mourir.

Louis.*

It is but a few days prior to the date of this last letter, that we find Lewis addressing a paper of instructions to the tutor of his son. On the most important points of education, he appears to have reflected with justness and good sense; and he expresses his suggestions with all the tenderness of paternal solicitude. But this paper derives its chief interest from the contrast which it presents between the benevolent and elevated feelings of the writer, and his cruel situation at the time it was composed. Such sentiments would command applause, were they to proceed from a Sovereign in the height of his popularity, elated with prosperous fortune, and cherished by the admiration of his subjects. But the unhappy Lewis was loudly and savagely calumniated by the people, to whose good he had devoted every wish; and it was while surrounded with unrelenting fanatics or sanguinary assassins, struggling to divide the spoils of his hereditary power, that he was anxiously occupied to impress upon his son's heart the care of this very people.

* Parlez lui souvent de la gloire de ses ayeux; et offrez lui, pour modèle de conduite, Louis IX, prince religieux, avec des mœurs et de la vérité; Louis XII, qui ne veut point punir les conjurés du duc d'Orléans, et qui reçoit des Français le titre de père du peuple; du grand Henri, qui nouerit la ville de Paris qui l'outrage, et lui fait la guerre; de Louis XIV, non lorsqu'il donne des loix à l'Europe, mais lorsqu'il pacifie l'univers, et qu'il est le protecteur des talents, des sciences, et des beaux arts.'

* Souvenez-

‘ Souvenez-vous de lui enseigner que c'est lorsqu'on peut tout, qu'il faut être très sobre de son autorité. Les loix sont les colonnes du royaume : si on les viole, les peuples se croient déliés de leurs engagements. Les guerres civiles nous ont appris que c'est presque toujours ceux qui gouvernent, qui par leurs fautes ont fait répandre le sang humain : le roi juste est le bon roi.’

‘ Que l'adulation n'annonce jamais les caprices de votre élève : mon fils n'apprendra que trop tôt qu'il sera libre un jour de satisfaire les siens.

‘ Exaltez à ses yeux les vertus qui font les bons rois ; et que vos leçons soient proportionnées à son intelligence. Hélas ! il ne sera que trop tenté d'imiter un jour ceux de ses ancêtres qui ne furent recommandables que par des exploits guerriers.’

‘ Apprenez lui avec Fénelon que les princes pacifiques sont les seuls dont les peuples conservent un religieux souvenir. Le premier devoir d'un prince est de rendre son peuple heureux : s'il fait être roi, il faura toujours bien défendre ce peuple et sa couronne.’

Surely, these sentiments will, at no remote period, attach the sympathy of all mankind to the fortunes and character of Lewis the Sixteenth. In the list of princes, there is not another example of such genuine benevolence, of patriotism so warm and so pure. Many sovereigns have greatly surpassed him in political capacity, some have displayed more comprehensive and profound views of legislative reform ; but in passionate affection for his subjects, he had no superior, no equal. To be the father of all the French, was a principle never absent from his thoughts ; it was the predominant feeling of his life ; which, at the age of twenty-two, dictated the invitation of Malesherbes to his cabinet ; and at the age of thirty-nine, upon the scaffold, inspired the forgiveness of his murderers. He had diligently read the history of his country, and felt a natural veneration for that long line of ancestors, in which he could number more than one patriot king ; but it is to the virtues of Henry that we find him most frequently recurring with generous emotion ; to ‘ the great Henry, who gave bread to Paris while it treated him with outrage ;’ and to the good Sully, who felt (as the king has expressed it in a letter to the Duc de Charon) ‘ l'amour chevaleresque pour tous les Français.’ During convulsions, in which, almost from the first, designs were avowed against his crown, and which from the very first were stained by assassination and massacre, the idea of shedding the blood of Frenchmen was regarded by Lewis as an impious parodie ; and we see him in these letters rejecting, with indignation and horror, all the proposals that were suggested by his courtiers and the princes of his family, for re-establishing royal authority by some desperate effort of power. In the happier days which preceded the revolution, he anxiously cherished a spirit of tranquillity

tranquillity in the foreign relations of his kingdom; for the exceptions which his reign offers to that system, were a sacrifice, to the maxims of his ministers and to public opinion, of his own love of peace; the most important, perhaps, of all the virtues that a king can possess,—certainly the most important under a constitutional monarchy, since an opposite disposition is so difficult to be restrained. But his love of the people shone forth most eminently in the disposition which he manifested, throughout his reign, to co-operate with disinterested reformers, in the limitation of his own prerogative, and the enlargement of popular rights. Lewis the Sixteenth was a revolutionist; and his name will be added by posterity to that memorable band of enthusiasts, who built their hope upon foundations unalterably solid, but attempted to realize the superstructure with incautious haste; who, looking forward upon the prospects of the human race, saw, without illusion, what is disclosed by the light of philosophy, and is established in the laws of nature; but, with a benevolence too sanguine, grasped at possession prematurely, forgetting that the arrangements of nature are developed and perfected imperceptibly with the lapse of ages.

At a time when some of these set no limits to their zeal, and had unknowingly associated themselves with anarchists ready for every crime, Lewis was calumniated as insincere in his professions of attachment to national freedom. But every person, by whom the events of that period have been candidly considered, has long ago acknowledged the falsehood, and even the absurdity of that accusation; though this Miss Williams still, with cold-hearted pertulance, strives to urge it. Her understanding must be as impenetrable by the force of evidence and reason, as she seems devoid of all sympathy or reverence for afflicted virtue. She can force a sneer of derision, while she treads upon the ashes of Lewis. This charge of insincerity is belied by every feature of his character, and by all the details of his conduct: throughout his whole career, and in the melancholy scenes that closed his life, he preserved an entire consistency with the measures he had pursued while in full possession of power. The real truth is, that the few deviations of his behaviour from what was clamorously demanded by the leaders of the mob, are to be ascribed to the bad faith which was so manifest on their side; who had procured his acceptance of a constitution which they never intended to retain, and were wholly occupied with schemes of fresh innovation and farther destruction. It would have been dishonourable to the character of Lewis as a king, if he had made no efforts, how unavailing soever, to restore tranquillity; and to his feelings as a man, if, in such circumstances of peril and of horror, he had made no

effort for the personal safety of his family. He would have been more than man, if he had upheld an unshaken systematic constancy, when, with no friend to counsel or to cheer him, surrounded by treacherous advisers and implacable enemies; he was engaged in a competition for the favour of a fanatic mob, against men who were restrained by no principle and by no system.

It is possible, that the monarch might have averted some of those miseries which overwhelmed himself and his people, had he been endowed with more commanding talents for the conduct of political affairs. Lewis was unqualified for enterprise; he wanted boldness; he was devoid of resources. But to describe him as unequal to the difficulties in which he was involved, is only to deny him the praise of transcendent genius. In the calm speculative exercise of his understanding upon the manners and transactions of mankind, he has evinced no inconsiderable powers of penetration. He was not often deceived in the characters of the men who acted under his eye; and from the assiduous study of history, he had acquired habits of practical and candid judgement. Nor should it be overlooked, in estimating his unfitness for the tremendous situation in which he was placed, that the revolution of France does not display an instance of a single character, in which a profound capacity, or even any remarkable degree of talent, for the direction of affairs, may be seen in union with a pure and magnanimous patriotism. The greatest blemish in the King's understanding, was his implicit superstition: yet it must be acknowledged, that even this was quite untainted by intolerance, while it was in harmony with all the other weaknesses, and all the 'passive graces,' of his meek susceptible temper.

We shall now resume our extracts. The following letter was written by Lewis, to the brother who most nearly resembled him, a few days after his return from Varennes.

‘ A MONSEIGNEUR.

‘ 23. Juillet, 1791.

‘ Il faut donc encore que mon malheur pèse sur vous, et que vous soyez une nouvelle victime de la fatalité qui me poursuit. Lorsque je cherchais un asyle, le repos, l'honneur, et des Français, je n'ai trouvé sur mes pas que la trahison, un abandon cruel, l'audace du crime, et la fatalité des circonstances. Plus d'espoir de ramener les Français; plus de justification à espérer, de liberté à obtenir, de bien à faire, de plaisir, de mon propre mouvement. Il y a quelques jours, que j'étais vain fantôme de roi, le chef impuissant d'un peuple tyran de son roi, esclave de ses oppresseurs; aujourd'hui je partage ses fers; je suis prisonnier dans mon palais; je n'ai pas même le droit de me plaindre. Séparé de ma famille entière, mon épouse, ma sœur, mes enfants, gémissoient loin de moi: et vous, mon frère, par le plus noble dévouement ~~vous~~ vous êtes condamné à l'exil; vous voilà dans les lieux où gémissoient tant,

tant de victimes que l'honneur appelait sur les bords du Rhin; mais que mon amour pour eux, mes ordres, ou plutôt mes pressantes invitations, rappelaient dans le sein de leur triste patrie ! Ils sont malheureux, dites vous ? oh ! dites leur que Louis, que leur roi, que leur père, que leur ami, est plus malheureux encore. Cette fuite, qui m'était si nécessaire, qui devait peut-être faire mon bonheur et celui du peuple, sera le motif d'une accusation terrible. Je suis menacé : j'entends les cris de la haine. On parle de m'interroger ! Non, jamais ! tout le temps qu'il me sera permis de me croire roi de France, j'éviterai tout ce qui tenterait à m'avilir. Oh ! mon frère, espérons un plus doux avenir : le Français aimait ses rois : qu'ai-je donc fait pour être hâti, moi qui les ai toujours portés dans mon cœur ? Si j'avais été un Néron, un Tibère.....Qu'un doux espoir nous reste encore. Puisse la première lettre que je vous adresserai, vous apprendre que mon sort est changé.

“ Louis.”

The aged aunts of the King had taken refuge in Italy, from the distresses of the revolution. Several letters are addressed to them, full of affection. We cannot deny our readers the pleasure of perusing one of them.

“ A MES DAMES.

“ 25. Mars, 1792.

“ Nous avons supporté avec peine, mes chères tantes, votre éloignement ; mais il était nécessaire à votre tranquillité, et à votre bonheur : il n'en a pas moins fallu, pour me priver des consolations que j'étais sûr de trouver dans votre tendresse pour moi. Fixées dans la capitale du monde Chrétien, vous jouissez, dans toute leur pureté, des bienfaits de la religion : offrez, pour moi, au Roi des rois vos ardentes prières, que le Ciel irrité s'appaise, qu'il rende à la France ses beaux jours, aux Français la confiance qu'ils me doivent, et que du sein des discordes le bonheur renaisse. Alors je dirai, J'ai assez vécu.

“ Vos dernières lettres me font parvenues dix jours plus tard qu'à l'ordinaire : c'est une suite du désordre qui existe dans les postes. Lorsque tout est désorganisé, les correspondances ne sont pas plus sûres que la marche des événemens.

“ Mes enfans sont languissans : la reine trouve la permanence de sa santé dans son amie, et moi dans ma résignation aux décrets de la Providence.

“ Adieu, mes chères tantes ! La distance qui nous sépare n'a aucun droit sur ma tendre affection pour vous.

“ Louis.”

This breathes all the feelings of domestic tenderness. The following is in a different tone, and expresses, with equal force, the firmness of personal dignity. It appears to have been suggested by a proposal from the Girondin administration, for some decisive measures against that party who still professed a regard to the monarchial, as well as to the other branches of the new constitution.

“ AU MINISTRE ROLAND.

“ 21. Mai, 1792.

“ On peut m'étonner ; mais on ne peut m'inspirer aucune crainte, et j'aurais maîtrisé mon ame par ce moyen. Je sais que le parti dont vous me vantez le patriotisme, la puissance, et la grande influence, est capable de tout oser : mais je fais aussi que le parti qui lui est opposé est plus nombreux, moins exalté ; il se compose d'une majorité de gens de bien, qui doivent enfin montrer de l'audace, et user du courage de la vertu. Je sais que je puis succomber ; que les méchants sont capables de tout, que le peuple Égaré croit à leur patriotisme, à leur déintérêt : mais, monsieur, j'ose prédire que le triomphe de ces gens là ne sera pas de longue durée. Si je succombe, ils voudront partager mes dépoilles. Ce partage amènera de funestes divisions : les gens de bien pourront alors respirer un moment : c'est alors qu'ils retrouveront leur courage : leur cause est juste : ils triompheront ; les François seront vengés. Un jour peut-être ils daigneront justifier ma mémoire. Monsieur, je ne verrai point ces gens là ; et jamais je ne pourrai transiger avec eux. Voilà ma résolution ; elle est immuable.

Louis.’

In the next letter, which we shall quote, Lewis describes the circumstances of a public outrage to which he was subjected.

“ A MONSIEUR.

“ 17. Juillet, 1792.

“ Il faut, mon frère, vous donner une idée d'une scène bien scandaleuse. Je vous ai parlé de certaines propositions qui m'ont été faites par deux partis, qui souvent votent ensemble aux Jacobins. Ces hommes, qui se détestent cordialement, qui déjà paraissent se méfier les uns des autres, et qui finiront par se faire une guerre à outrance, voudroient, je ne sais pas trop pourquoi, me ranger sous leurs bannières. Insensible à leurs promesses, à leurs menaces, sourd à leurs invitations, j'ai constamment refusé de servir leurs projets. Ils ont voulu me faire peur. Une députation de l'assemblée m'avait été envoyée pour des objets importans. On a réussi à composer cette députation d'hommes exaltés, de ces têtes mal organisées qui brusquent les convenances, et qui se croient les égaux des rois, et les êtres libres par excellence, parce qu'ils ont de forts poumons, qu'ils regrent en partage le don des injures, et qu'ils ne savent jamais respecter le malheur.

La députation est introduite. Un certain Genisson portait la parole. Il parle bien, même avec quelque modération. Cependant des tournures singulières, des expressions hasardées, défigurent son discours. J'ai répondu : j'ai fait parler le cœur à la place de l'esprit : j'ai oublié que j'étais roi ; et je me suis exprimé avec franchise.

La reine était présente. Un jeune homme à tête ardente, l'air très ébourdi, a pris la parole : il a gourmandé la reine. ‘ C'est vous, Madame,’ a-t-il dit, ‘ qui perdez le roi : ce sont vos conseils : vous n'êtes entourée que de royalistes ; et vous éloignez les patriotes.’ La reine a répondu avec dignité : il a haussé les épaules. Je voulais appaiser le caractère de ce conseiller indiscret. Il a repris la parole avec effronterie,

et

et a daigné m'assurer que j'étois un brave homme, mais induit en erreur par des traîtres, des ennemis de la patrie. Que répondre, pour désabuser cet homme ? Garder le silence, adresser la parole à l'orateur de la députation, voilà ma conduite. J'ai apperçu que plusieurs des députés présens partageaient le délire, appelloient cela du courage, et applaudissaient ce jeune audacieux, que l'on m'assure se nommer M.....n de Th.....e.

‘ J'ai raconté cette anecdote à plusieurs membres du côté droit. Ils m'ont assuré que le lendemain, dans une des allées du jardin des Feuillants, ce jeune député s'était vanté de son audace, et qu'il s'était cru le digne rival de Caton, parce qu'il avoit manqué d'égards à une princesse. Voilà quels sont les hommes qui prétendent gouverner la France. O mon frère, plaignez moi ! —

Louis.’

We approach now those horrors, which, in the history of man, civilized or savage, have never been surpassed. During the night that succeeded the 10th of August, the Royal family were thrust into a wretched apartment, adjoining to the hall of the Assembly. Next morning, the King addressed this note to the President.

‘ A M. VERGNAUD,

‘ Monsieur le President, 11. Août, 1792, 10 Heures du Matin.

‘ Dans le tumulte d'une séance aussi orageuse, si déchirante pour ma sensibilité, si outrageante pour la dignité de la représentation nationale, je pense que le corps législatif s'occupera des moyens de calmer l'effervescence populaire. Je ne demande point justice du grand attentat qui m'a forcé de venir avec ma famille me placer avec confiance sous l'égide des délégués du peuple. Il y aurait trop de coupables à punir pour penser qu'un grand exemple intimidât les pervers. Que le mal qui est fait soit oublié ; que la paix renaisse des cendres du palais de mes pères ! Je ne croirai pas encore que le sacrifice égale la douleur profonde que je ressens de la violation des loix, et de la subversion de l'ordre public.

‘ Les travaux de l'assemblée exigent qu'on me choisisse un asile où je puisse trouver la sûreté de ma famille, et jouir moi-même d'un bien que l'universalité des Français attendent de votre sollicitude.

‘ Louis.’

On the same day, he wrote to his brother.

‘ A MONSIEUR,

‘ 11. Août, 1792.

Dans le sein de l'Assemblée Nationale.

‘ Le sang et le feu ont tour-à-tour signalé l'affreuse journée d'hier, mon cher frère. Constraint de quitter mon palais avec ma famille, de chercher un asile au milieu de mes plus cruels ennemis, c'est sous leurs yeux même que je vous trace, peut-être pour la dernière fois, mon affreuse position. François premier, dans une circonstance périlleuse, écrivit, ‘ tout est perdu, hors l'honneur : ’ moi, je n'ai plus d'autre espoir que dans la justice de Dieu, dans la pureté des intentions bienfaisantes que je n'ai jamais cessé d'avoir pour les Français. Si je suc-

combe, comme tout porte à le croire, souvenez-vous d'imiter Henry IV. pendant le siège de Paris, et Louis XII. lorsqu'il monta sur le trône.

* Adieu ! mon cœur est oppresé : tout ce que je vois, tout ce que j'entends, est fait pour m'affliger. J'ignore quand et comment je pourrai désormais vous écrire.

Louis.*

Two days after; just as he was about to be consigned to the custody of Santerre in the Temple, he addressed another letter to this brother, which he intrusted, concealed in a piece of bread, to a friend who did not quit him till the last moment. As he delivered it into his hands, he is said to have shed a tear : ‘ c'est un éternal adieu ’ (he said) ‘ que j'adresse à mon frère.’ But the person who undertook this service, was arrested upon the frontiers ; and the paper was deposited among the archives of the commune, where it remained till after the destruction of Robespierre.

‘ *Paris, ce 12. Août, 1792, 7 heures du matin.*

Mon frère, je ne suis plus roi. Le cri public vous fera connaître la plus cruelle catastrophe . . . Je suis le plus infortuné des époux et des pères ! . . . Je suis victime de ma bonté, de la crainte, de l'espérance. C'est un mystère inconcevable d'iniquité. On m'a tout ravi ; on a massacré mes fidèles sujets. On m'a entraîné par ruse loin de mon palais ; et l'on m'accuse ! Me voilà captif ; ou me traîne en prison. La reine, mes enfans, Madame Elisabeth, partagent mon triste sort. Je n'en puis plus dormir ! je suis un objet odieux aux yeux des Français préverus . . . Voilà le coup le plus cruel à supporter. Mon frère, bientôt je ne ferai plus. Songez à venger ma mémoire, en publiant combien j'aimais ce peuple ingrat. Un jour rappelez lui ses torts, et dites lui que je lui ai pardonné. Adieu, mon frère, pour la dernière fois !

Louis.*

None of our readers can have forgotten the letter, in which Maleherbes, from his retirement, and at the age of eighty, intimated to the President of the Convention, that, having been twice called to the council of him who was then his Master, at a time when the situation was critical by all, he felt himself bound to offer the same service; now that it was regarded as dangerous. Lewis wrote to Maleherbes, from his prison.

‘ A M. DE MALESHERBES.

‘ *Du Temple.*

‘ Je n'ai point de termes, mon cher Maleherbes, pour vous exprimer ma sensibilité pour votre sublime dévouement. Vous avez été au devant de mes yeux : votre main octogénaire s'est étendue vers moi pour me repousser de l'échafaud ; et, si j'avais encore mon trône, je devrais le partager avec vous, pour me rendre digne de la moitié qui m'en resterait. Mais je n'ai que des chaînes, que vous rendez plus légères en les sauvant. Je vous renvoie au ciel et à votre propre cœur, pour vous venir lieu de récompense.

‘ Je

‘ Je ne me fais pas illusion sur mon sort. Les ingrats qui m’ont détrôné ne s’arrêteront pas au milieu de leur carrière : ils auraient trop à rougir de voir sans cesse sous leurs yeux leur victime. Je subitai le sort de Charles Premier ; et mon sang coulera, pour me punir de n’en avoir jamais verlé.

‘ Mais ne serait-il pas possible d’ennoblir mes derniers momens ? L’assemblée nationale renferme dans son sein les dévastateurs de ma monarchie, mes dénonciateurs, mes juges, et probablement mes bourreaux ! On n’éclaire pas de pareils hommes ; on ne les rend pas justes ; on peut encore moins les atteindre : ne vaudrait-il pas mieux mettre quelque nerf dans ma défense, dont la faiblesse même ne me sauvera pas ? J’imagine qu’il faudrait l’adresser, non à la convention, mais à la France entière, qui jugerait mes juges, et me rendrait, dans le cœur de mes peuples, une place que je n’ai jamais mérité de perdre. Alors mon rôle à moi se bornerait à ne point reconnaître la compétence du tribunal où la force me ferait comparaître. Je garderais un silence plein de dignité ; et, en me condamnant, les hommes qui se disent mes juges, ne seraient plus que mes assassins.

‘ Au reste, vous êtes, mon cher Malesherbes, ainsi que Tronchet qui partage votre dévouement, plus éclairé que moi : pesez dans votre sagesse mes raisons et les vôtres : je soucris aveuglément à tout ce que vous ferez. Si vous assurez cette vie, je la conserverai pour vous faire ressouvenir de votre bienfait : si ou nous la ravit, nous nous retrouverons avec plus de charmes encore au séjour de l’immortalité.

‘ Signé, Louis,’

Will it be credited, that a woman—once a woman of England, could be roused to no stronger language, by such a catastrophe of such a man, than to ‘ lament that his country was not spared the offence of his death ? ’ We did once intend to have irritated and disgusted our readers with some specimens of her remarks on the letters that we have extracted. But we respect their feelings. At the present moment, we willingly spare such a violence to our own. When the tragic spectacle closes, it is most pleasing to leave the scene altogether ; to repose upon our sorrow, undisturbed by coarser objects ; and indulge the best emotions of nature, unshocked by any recollection of the prejudiced and unfeeling portion of mankind.

ART. XVIII. Remarks on Currency and Commerce. By John Wheatley, Esquire. 8vo. pp. 262. London. Cadell & Davies. 1803.

THIS work, Mr Wheatley informs us, was undertaken to elucidate the principles of national wealth ; which, notwithstanding the Inquiry of Dr Smith, are still, it seems, very imperfectly understood. We may add, that it appears to have originated in none of those party motives, or other temporary

views, which give rise to the greater number of pamphlets published upon topics connected with national policy. The conduct of the work, as well as its subject, is purely speculative; and it is delivered to the public, we are told, rather as the prospectus of a larger book, than as a separate treatise.

Such being the design of this tract, and so high its pretensions, notwithstanding that disidence which has dictated the hint about a future work, our attention is naturally directed to examine whether any thing is performed by Mr Wheatley to justify his hopes of effecting those reforms in political economy which the celebrated writings of Smith, Hume, and the French economists, have failed to accomplish. We will venture to predict, that after our readers shall have considered the abstract which we purpose to submit, they will participate in our disappointment, and agree with us in awarding to Mr Wheatley's errors and inaccuracies alone the praise of originality. The general character of the work, indeed, is easily given. Our author has learned the language, and treasured up the results of those investigations which, during the last fifty years, have effected so great an improvement in political science; but he has failed in forming to himself distinct views of the principles upon which these new and enlightened doctrines depend, and has not always followed out the line that separates them from the errors to which they succeeded. He has conceived, that, in order to recommend these improvements to practical statesmen, nothing more than a new description of them is required; and, for the purpose of varying the light in which they should be viewed, he has partially involved them in obscurity. His work is thus a mixture of unquestionable conclusions, and false or doubtful demonstrations. In so far as it exposes those errors of the mercantile system, which were demonstrated by Smith, its reasoning is irresistible; but the other departments embrace conclusions as full of error as any which that system presents. The manner, too, in which the most received doctrines are delivered, favours of a confidence in their originality, often bordering upon the ludicrous, and leads us constantly to imagine that Mr Wheatley forgets the very existence of the works from whence he derived his instruction. He attacks the errors of the mercantile theory, as if no one but himself had ever doubted of its truth; and proposes the very principles upon which all well informed men have long ago rejected it, in the same language of discovery that might have been used had no such writers as Hume or Smith ever existed. Thus while the introduction of each succeeding subject provides some novelty, and the deception is kept up by the occurrence of topics not immediately perceived to be erroneous, a little

little attention is always sufficient to develope the characteristic feature of the work—a mixture of unfounded with unquestionable tenets; of errors, which are never likely to gain ground, with propositions which in the present state of the science may be reckoned truisms; of doctrines true, but old, with reasonings in their support, as erroneous as they are novel and unnecessary. The meritorious parts of this tract we shall with pleasure specify as we proceed in such an examination of it as may be necessary to justify these general strictures, and to bring the subject before our readers.

The First chapter contains an exposition of the fundamental principles upon which our author grounds his objections to the leading doctrines of the mercantile theory. This theory, he remarks, has not been attacked with sufficient success by Dr Smith, in consequence of his omitting a minute examination of the properties of money. To investigate these, is Mr Wheatley's primary object; and he describes them in three propositions—that an increase of specie is an increase of currency, and not of capital; that an increase of currency is not an increase of wealth to a nation insulated from all commercial intercourse with foreign states; and that no country can ever accumulate a greater currency than will enable it to circulate its commodities, as nearly as possible, at par with other nations, unless the freedom of mutual intercourse be obstructed by physical impediments, or by legal restrictions.

Our readers will immediately perceive, that Mr Wheatley has gone a great deal farther than was necessary, in order to refute the fundamental propositions of the mercantile theory. This theory is not erroneous because it inculcates the utility of money, but because it prescribes an exclusive preference for money. In order to refute such a doctrine, it was not necessary to prove that money forms no part of national wealth; but only that money, like every other commodity, will be possessed by a people in proportion to their effective demand for it—their occasions for using it, and their ability to purchase it. Mr Wheatley's third proposition, therefore, if accurately demonstrated, was quite sufficient to overthrow the tenets of those who maintain that the commercial policy of a nation should be directed to the multiplication of the precious metals, rather than of any other commodity. This demonstration is made up, partly of general remarks on the origin of that erroneous idea, almost copied from the Wealth of Nations, (vol. I. p. 431. & vol. II. p. 139.), and partly of the arguments used by Mr Hume, in his celebrated essay on the Balance of Trade.

But to deny that an increase of specie is an increase of the national capital, was not more unnecessary than incorrect.

Money

Money is a part of the capital of every nation. It is that part which is required for the distribution of the other portions. The precious metals have a twofold use. They either supply the materials of certain valuable manufactures, or they are coined and employed as a medium of exchange. A greater quantity of bullion will never be accumulated in any country than the demands of the inhabitants of that country require, for their utensils and ornaments on the one hand, and for performing their exchanges on the other. If a greater quantity is turned towards the plate manufacture, and there is a deficiency of coin, a portion of the plate will be melted, and coined. If there is a superabundance of coin, and a demand for plate, the coin will be melted and manufactured; and if there is both more money and more plate than the trade and the luxury of the society requires, bullion will be exported to purchase something that is in request. But this is exactly the predicament in which every other commodity is placed. If there is more unground corn in any country than the sufficiency of the cattle requires, and the inhabitants are in want of bread, part of the grain will be ground to support them. If there is a superabundance of flour or meal, and a want of fodder, the cattle will be fed with the overplus of the ground corn; and if both the grain and fodder are more than sufficient in quantity, the overplus will be exported, to buy such commodities as the society may require. The increase of bullion, like the increase of grain, is an augmentation of capital. Both are valuable commodities. The one is necessary for subsistence, and is besides subservient to the gratification of certain luxurious appetites; the other is required for traffic, and procures, also, certain luxuries of a peculiar kind. Were the wealth of a nation suddenly increased, either by the acquisition of grain or of bullion, and were it at the same time cut off from all connexion with other states, an extravagant use would be occasioned, in the one case, of provisions; in the other, of ornaments and plate: and if the acquisition were so great that the nation had more than it could in any way make use of, a portion would be entirely lost, in the one case, of grain, which would be left to rot, in the other, of money, which would circulate, or be manufactured, in unnecessary profusion. The abundance of grain would, indeed, produce much better effects than that of bullion, because it forms the chief necessary of life; but the superabundance of both would be equally useless, because the surplus of a necessary article is as useless as the surplus of a luxury or convenience.

It is evidently absurd, then, to say, that specie does not form a part of the national capital. It forms a most valuable portion

of the wealth of every commercial country, of every society in which exchanges are carried on, and luxuries esteemed. The increase of specie, too, is in itself clearly the increase of wealth, while the number of exchanges, or the tastes of mankind, require it; and if the increase outstrips the demand arising from these causes, still the overplus is, in every sense of the word, capital; because it may be easily exchanged for the commodities of other nations. The error of the mercantile theory consists in supposing that this part of national wealth is more valuable than the other parts, and that its augmentation deserves the peculiar care of government. It would have been just as great an error to promote, by arbitrary regulations, the importation of more grain or wool than the wants of the people require. A superfluity either of metals, or subsistence, or clothing, is equally useless.

But it is not a little singular, that Mr Wheatley should admit the case of gold and silver mines to form an exception to his general position. Money, he observes, is a medium of exchange, for which an equivalent has been given, and no more than an equivalent can be received. It can therefore only circulate, not increase, the produce and productive stock of the community. But the gold and silver ores are an original produce, for which no equivalent has been given; which, though they may be coined by government, will soon be exchanged, if superabundant, for the commodities of other nations, and which always afford a clear gain, besides the expence of production. Now, it is very evident, that the manner in which the precious metals are procured cannot possibly affect this question. An equivalent must be given for them in every case, and in every case a profit must accrue from the purchase. If they are obtained by mining, the equivalent is the expence of mining, including all the losses which arise from the numerous unsuccessful speculations of that kind. If they are obtained by commerce, the equivalent is the goods which purchase them. The capital employed in mining is replaced with a small profit; and the capital employed in importing bullion is also replaced with a profit. In which way soever a nation obtains the precious metals, it gains all that convenience or gratification which their use affords to commerce or taste. The precious metals, indeed, when used as coin, distribute the stock of the community, without directly increasing its quantity. The profit that arises from the use of them is nevertheless as certain as that which arises from any other branch of the circulating capital, or from the fixed capital, to which it bears, as Dr Smith has remarked, a striking resemblance in several respects. We have insisted at greater length on these erroneous views of Mr Wheatley,

Wheatley, because they border very nearly upon the fundamental principles of the economists, and have probably been introduced into his speculations from some indistinct conception of that ingenious theory. It is fair, however, to remark, that though they frequently recur in the course of his subsequent reasonings, they affect the language more than the substance of his statements, which, in so far as they are levelled at the main errors of the mercantile system, do not materially depend on the portion of error mingled with his preliminary views.

In the Second chapter, our author discusses, at considerable length, the theory of the balance of trade. That theory, he observes, is founded upon the position, that a nation can only be enriched by the excess of its exports above its imports, which must be received in money. Unless the money thus acquired shall be retained, it might as well not have been imported; and if the money is reexported for other commodities, these might as well have been procured, in the first instance, by an exchange of the goods sold to procure the money. The detention of the money, on the other hand, is impossible, without an entire insulation of the community from all commercial intercourse; and, even if it could be effected, the community would lose exactly the value of the goods previously exported to purchase it. The theory of the balance of trade is therefore proved to be absurd, by a reference to the principles laid down in the first chapter.

In all this, there is more of indistinctness and repetition, than of error. It is true that more money cannot be permanently retained than the wants of the community require: But this was proved before, and the proof of it was sufficient to overthrow the theory of a balance. It is incorrect to say, that unless the money is retained, the goods might as well have been sent at first to the market where the commodities in request are sold. The community gains by the intervention of a circulating medium, which enables it to trade with countries where there is no demand for its own produce. It is still more inaccurate to maintain that if a superfluity of money could be retained, the community would lose the price which it had paid for the superfluous quantity. The price was itself a surplus, and had no more value than the surplus of specie. Both the one surplus and the other, derived their value from the capability of being exchanged for commodities which are useful. Mr Wheatley would have saved himself much trouble, if he had formed at first a steady view of the fundamental error of the mercantile system, viz. the *exclusive preference* which it unnecessarily gives to the commerce of the precious metals.

Having

Having refuted the idea of a balance by referring to the doctrines previously laid down, he now proceeds, after some needless repetition of those doctrines, to explain, from the facts respecting foreign exchange, the manner in which an equilibrium of money is always preserved. When two countries trade together, and the standard of their currency is the same, that is, according to our author's acceptance of the words, when there is the same relative proportion of currency in both, money only serves as a measure of equivalency, not as a medium of exchange. When the currency of one country exceeds that of the other, more goods are imported than exported by the former; its debts to the latter exceed its claims; and the bills against it, being more numerous than the demand for them, sell at a discount. For the same reason, the bills against the creditor country bear a premium, their number falling short of the demand. The depreciation of currency from abundance, is therefore the cause of that excess of debts above claims, which occasions a remittance of bullion to the creditor country, and the payment of a premium, in proportion to the expence, risk and profits of this remittance. This is the only view of Mr Wheatley's general explanation, which we are able to collect from the long and confused statement which he gives of the subject. Some of his expressions, indeed, we have not been able to comprehend. 'The course of exchange,' he says, 'is the expedient to which mankind have resorted for maintaining the purity of the common measure of equivalency.'

The excess of currency in any country is unquestionably one cause of what is called an unfavourable balance of trade. But instead of being the only cause, or the ultimate fact, it is a much less general circumstance than the excess of debts above credits, which our author has deduced from it alone. A few obvious considerations will render the indistinctness of this view sufficiently apparent.

Money, like every other commodity, always follows the effectual demand for it. But sometimes the traders, whose business it is to supply the market with specie, import too much. The overplus will be reexported—that is, other goods to the amount of this overplus will be imported; and before the specie which buys them is remitted, a debt is constituted against the importing country. The depreciation of specie from abundance, is therefore one cause of the excess of debts above claims; but it is no more a cause of this excess, than the depreciation of any other exportable commodity, in consequence of an overstocked market; and the equality of debts and claims will be restored in all cases alike, by the actual exportation of the goods for which value has been received. If there is no demand for the bullion, or for the goods, in the foreign market, the balance will remain against the country which

which has imported, and the bills expressing its debt will continue to sell at a discount: But this will happen, whether the excessive importation has arisen from the abundance of its currency, or from the length of credit which it obtains from other countries, and which enables it to receive supplies before it sends out the equivalent. The equality of debts and claims will be restored; and the bills will become saleable at par, as soon as the goods, of what kind soever, are exported, for which the imports were obtained. Exchange might be at par, while nothing but goods on one side was given for money on the other; and the bills against a nation might bear a premium, while it exported nothing but bullion. The difference between the exports and imports, from whatever cause it arises, must in every case constitute the difference between the value of the bills of two nations trading together.

Mr Wheatley, after some statements of fact tending to illustrate the impossibility of retaining a superabundant quantity of coin in any country engaged in foreign commerce, remarks, that at various periods during late years, the balance of trade has been unfavourable to England, notwithstanding the quantity of money coined, and the constant excess of exports above imports, according to the custom-house accounts. In order to explain this apparent discrepancy, our author endeavours to prove that the excess of exports above imports is not a complete test of a favourable balance of trade; that the course of exchange is the only certain proof which we have of such a balance; and that the influx or efflux of money corresponds with the course of exchange. That the balance of export and import, as stated in the custom-house books, affords no decisive proof of the real balance of credit and debit, is a proposition of which few have entertained any doubts. Mr Hume and Dr Smith, indeed, pass it over as unquestionable, without adducing arguments in its favour. But if Mr Wheatley means to assert, that there is any difference between the *real* balance of exports and imports, and the balance of trade; we apprehend he is using a language hitherto unknown in the speculations of political economy. If, by the course of exchange, too, he means the apparent rate, as he certainly must, it is evident that he has omitted one consideration of very material importance—the effects of an alteration of the purity of the currency, or, which is the same thing, of the quantity or the credit of such part of the currency as cannot be exported when too much multiplied. Whenever, from any excess or discredit of this description, the market price of bullion becomes greater than its mint price, an apparent fall in the course of foreign exchange must take place, although the real balance of trade may be at par, or favourable; that is, the claims of the nation may equal or exceed its debts.

Proceeding upon the supposition, that the exports of this country have, at different times, been greater than its imports, while an unfavourable balance of trade was indicated by the course of exchange, our author attempts to reconcile the inconsistency, by examining the state of foreign expenditure during those times. This, he observes, could only absorb the money that would otherwise have been imported, if a balance had been due. But it is, in fact, entirely transacted by bills; that is to say, either by the remittance of bills in favour of this country, obtained instead of the balance due; or by drafts against this country, which constitute a debt, if no balance is due. Now, as no balance can be due, according to our author, while the course of exchange continues below par, the foreign expenditure must be defrayed by drafts upon this country, as indeed the public reports state it to have been; in other words, the amount of this expenditure, which does not appear in the custom-house books, must be added to the imports; and it is to meet this expence, that the excess of exports, otherwise unaccounted for, has been made. In all this reasoning, we can discover no inaccuracy. It is, indeed, sufficiently ingenious and correct; tending to exhibit, in a very clear point of view, a palpable deficiency in the custom-house returns, as measures of the commercial balance; and supported by the official documents respecting the public foreign expenditure, as well as by the fact of the suddenly increased exportation to Germany during the years of war.*

But, in the remainder of Mr Wheatley's speculations upon the same branch of his subject, we meet with a remarkable degree of carelessness and confusion. The foreign expenditure, he maintains, can never alter the standard of currency; that is, the relative proportion of money in the nation. But if the total balance of trade is unfavourable, the imports must exceed the exports, according to Mr Wheatley's own admission, p. 73. Now, all that part of the imports, which is accounted for by the custom-house books, falls short of the exports: therefore, the whole foreign expenditure, public and private, is justly added to the ostensible imports. But this addition renders the imports greater than the exports, since the course of exchange, and the total balance, is unfavourable. Hence, it is evident, that the balance is turned by that part of the imports which the custom-house books do not account for, viz. by the foreign expenditure.

If

* By comparing the tonnage with the value of the cargoes in the public returns for years of war, the increased exportation will be found to consist chiefly of the finer manufactures, according to Dr Smith's remarks, from which more illustration of the subject might have been derived, than Mr Wheatley has thought proper to draw.

If the export, which, according to Mr Wheatley, is caused by the foreign expenditure, were sufficient to balance that expenditure, the whole exports would be equal to the whole imports, and no debt would remain. The existence of the debt, or of the unfavourable exchange, is a complete proof that the amount of the foreign expenditure exceeds the difference between the exports and the ostensible imports. Mr Wheatley concludes, in general, (and the position, so far as we know, is entirely new), that a permanent excess of the exports above the imports, of any nation, can only be produced by foreign expenditure, and by the consumption of bullion; but chiefly by the former of these causes. Now, there is one very obvious, and much more constant cause of this excess—the increase of domestic resources, and the consequent demand for an augmentation of the circulating medium. This will not, indeed, raise the proportion between the precious metals and other commodities, higher in one country than in all the rest with which it trades; but it must operate in maintaining the proportion between the number of exchanges to be performed, and the medium which performs them,—unless, in so far as the substitution of a cheaper instrument of commerce may, to a certain extent, preclude the necessity of exporting a surplus, in order to procure the precious metals. We cannot leave the two first chapters of this tract, without remarking, that the refutations of Sir James Stewart's objections to Mr Hume's arguments, given at the end of each, are extremely loose, and would be quite unsatisfactory to any one predisposed in favour of the mercantile system.

The object of the Third chapter, is to lay down the true principles of national wealth, as derived from commerce, in opposition to the hypothesis of the balance of trade, refuted in the foregoing parts of the treatise.

All direct foreign commerce, according to Mr Wheatley, is the exchange of equivalents, and no nation can be said to gain any accession to its wealth by such an operation. The merchants, who act as the factors in this intercourse, receive a commission; but this, being ultimately paid by the country to which they belong, and of which they circulate the produce, does not tend to increase its opulence. The transit trade, our author conceives to be in a different predicament. The nation which acts as an entrepôt to the commodities of foreign countries, receives the commission from foreigners, and gains so much clear profit at their expence. This profit is, however, paid in produce, not in money; and forms, therefore, no accession of specie.

'In whatever instance,' says he, 'a state is possessed of the transit trade, by forming an intermediate mart for foreign produce, whether it unite

unite with its agency, the profits of the carrying trade, as was formerly the case with Holland, or whether it be a simple entrepôt, as at present with Hamburg, it derives an accession of wealth from foreign nations proportionate to the amount of the commission. The city of London possesses some portion of this transit trade, and has some business as an intermediate agent ; but, on account of our repugnance to the establishment of free ports, the policy of which I shall hereafter consider, it forms, in a much greater proportion, a dépôt for the domestic and colonial produce of Great Britain, than an entrepôt for foreign produce.

‘ Though, therefore, the intermediate agency of an entrepôt forms an exception to the general principle, that no profit be [is] attainable in the commercial interchanges of independent nations, yet it has no tendency to effect [affect] the general question [proposition], that a nation is enriched by the increase of produce, and not by the accumulation of money.

‘ If it may be established as a fundamental principle, that all commerce is an exchange of equivalents, it follows as a necessary consequence, that whatever tends to an increase of equivalents, tends to an increase of opulence ; and that the commercial wealth of a nation should be estimated by the whole value of its equivalents collectively, and not by that portion only which returns an equivalent in bullion, which there is no possibility of retaining, and which, when parted with, can only repurchase the equivalent that bought it.’ p. 110. 11.

Now, we do not think that there is any thing in the mercantile system more erroneous than this doctrine ; and the error unfortunately extends to the very fundamental principles of commercial prosperity. Trade enriches a nation, by enabling it to exchange what it has no use for, against what it stands principally in need of ; and not by the profit or commission that may be realized by its merchants. It is absurd to say that all trade is merely an exchange of equivalents : if this were the case, no exchange would ever take place at all. The exchange is always a gain to both parties, and each receives more than he gives away. In the case of an absolute and proper surplus—that is, of such an excess of particular commodities, as could in no way be used at home, there is a direct gain of the whole articles obtained in exchange ; and, in every case, there is a great gain to the nation, out of which the profits of the trader are defrayed. If one country produced no corn, but raised twice as much cotton as it had any use for, and another had a great superfluity of corn, but no material for clothing, it is evident, that a trade of barter between those two countries would be in the highest degree beneficial to both ; and would augment their real riches in an incalculable proportion—in a much higher proportion, and much more directly, than if they were to apply themselves to the transit trade, and carry their profits, instead of their produce, to be exchanged for these mutual

ual necessaries. The effect of this barter, too, would not be confined to the exchange of the existing superfluity; it would stimulate both countries to increase their industry, and enlarge the quantity of their exchangeable produce. The one would cultivate its corn fields, and the other its cotton plantations more extensively; and the population of both would increase, along with its ability to feed and clothe an additional number of inhabitants. To this simple case, all the complicated operations of commerce are ultimately reducible; for all the advantages of trade centre in this, that it enables us to get what we want, by giving what we have no use for, and stimulates our industry to increase the quantity of that surplus, which is good for nothing, but for being exchanged against something else. It is impossible, therefore, to commit a greater error than Mr Wheatley has done, in asserting that all trade of exchange is absolutely unprofitable, and that a real gain can only be made by the transit trade. This fundamental error, however, runs through the whole of the third chapter; and towards the conclusion, it is defended by the example of the greatest commercial states, particularly Holland, Hamburg, and the Italian republics; all of which, says our author, acquired their principal wealth by the profits of the transit trade, p. 165, 6, 7, 8. We will venture to assert, that no part of the mercantile theory is more absurd, than the peculiar favour with which it regards the carrying trade, as a special means of levying contributions upon foreigners. And the only difference between this feature of the mercantile theory, and the positions just quoted from Mr Wheatley, is, that he favours the carrying trade (of which the entrepôt trade forms a branch), as a means of levying those contributions, not in the shape of money, but of goods. The merchant who employs his stock in circulating the commodities of foreign nations, receives a profit from them; but the effect of this employment of his stock, is to replace two foreign capitals; to promote the industry, and increase the wealth of foreigners. Had he employed the same stock in circulating the produce of his own country, it would have yielded him quicker returns of profit—would have promoted the industry, and increased the wealth of his countrymen. Had he employed it in exchanging the produce of his country against that of foreigners, it would still have yielded profit; and would have increased the wealth of the country more than the carrying trade can do—though less than the home trade.

In every sort of foreign commerce, both in the foreign trade of consumption, and in the carrying trade, the profits of the merchant come from the foreign country, inasmuch as the use of foreign commodities enables the capitalist to obtain returns. In the

foreign trade of consumption, he receives his profit out of that valuable surplus which his operations have added to the stock of his country, by procuring a useful for a superfluous portion of property. In the carrying trade, his gains arise from the value which he has added to the stocks of foreign nations, by means either of his capital alone, as in that carrying trade which employs foreign vessels; or of his capital, and some part of the fixed stock of his own country, as in the entrepôt trade, and in that carrying trade which employs no foreign vessels. The direct augmentation of wealth, which his country receives in the shape of his profit, is the same in all these cases. That much more important increase of opulence, which it receives from the replacing of stock, is confined to the foreign trade of consumption, and the latter branch of the carrying trade; but is, beyond all comparison, greatest in the foreign trade of consumption.

The example of those commercial nations, whose wealth has been promoted by the transit trade, is of no moment in the present discussion. Their attention was directed to that branch of traffic, from the extent of their capitals, and the peculiar circumstances of their situation with respect to other states. The acquisition of the carrying trade is, in fact, a certain consequence of an overflowing capital, and a convenient maritime situation. But it is an acquisition not to be desired, until every other channel of employment is full. Mr Wheatley appears to us almost equally inaccurate in his general observations upon the wealth of nations, as deduced from their exports. In order to estimate the comparative wealth of Great Britain and the Continental states, he thinks it sufficient to compare the total exports of Great Britain with the exports of those other states. It is unnecessary to remark, that without exporting a single ton of goods, a nation may acquire prodigious wealth; and that the net revenue of a country engaged in foreign trade, cannot be calculated from its exports, any more than from any particular branch of its domestic circulation.

The remaining part of this chapter we consider as by far the best part of Mr Wheatley's whole treatise. It is occupied with remarks upon the commerce of Great Britain, which he divides into three branches—the home trade, the colonial trade, and the transit trade. We particularly refer our readers to his remarks upon the East Indian commerce, which are, for the most part, ingenious and liberal, and which we wish he had not coupled with the very loose and declamatory allusions to the provincial government of Rome, p. 161. The errors of his general opinions concerning the transit trade, we have already taken the liberty of noticing. His more minute and practical observations

observations upon the benefits of a free-port law, are entirely unexceptionable. But we must observe, before leaving this chapter, that there is a great degree of inaccuracy in his division of the subject. By home trade, our author understands the exchange of domestic produce, or domestic manufactures, against foreign produce or manufactures. This is exactly what all other writers denominate a foreign trade. Pursuing the erroneous idea formerly pointed out, he considers the extent of this traffic, and of the colonial surplus of imports, as the true tests of national wealth; and omits altogether the most important branch of traffic—the internal commerce of the country; that of the country and the towns; that, in short, which all other writers have denominated the home trade. Yet Mr Wheatley considers the colonial trade, which is in fact a home trade, as a branch of foreign commerce—otherwise, he would scarcely enumerate it as one of his three divisions; and he bestows, at the same time, unbounded eulogium on the penetration of the late Inspector-General, for having discovered that the imports from the colonies are not like those from foreign nations, but are to be viewed as remittances, in so far as they exceed the exports thither. It is inconsistent, too, with all accuracy of principle to maintain, that this excess of imports is the only gain which accrues from the colonial trade. The excess is not a gain from the colony trade: it is a remittance of rent to the non-resident proprietors of colonial property, and of interest to the moneyed men whose capitals are lent upon colonial securities. The abolition of some branches of the colonial monopoly might indeed augment this surplus, but not exactly in the manner described by Mr Wheatley.

‘If’ (says he) ‘some proportion of the produce now forced out to our colonies were diverted to an independent state, for an equivalent in foreign merchandise, and the same quantity of colonial produce were notwithstanding imported, the nation would be enriched by the proportion directed to the continent for a foreign equivalent. If by a forced exportation of seven millions of produce to the West Indies, we received only eight millions in return, which is the present state of our trade, the nation gains [would gain] but one million by the bargain. But if, instead of this policy, we exported four millions out of the seven to the continent, to be returned in an equivalent of foreign produce, and the eight millions of sugar were received, with the aid of only three millions from home, the nation would gain five millions by this trade, instead of one. I have no means of estimating the proportion of supply which the planter would draw from this country, if he were at liberty to choose his market; but it is obvious, that the less exports he take [takes] from us, and the more produce he bring [brings] to us, the more he advances the interests of his country; and not by the more he take [takes] from us, and the less he bring [brings] to us, as the Balance of Trade [Theory of a Balance of Trade] has endeavoured to persuade us.’ p. 132. 133.

The great omission of circumstances in this statement of the subject, is too obvious to require farther notice.

Upon the whole view of these three chapters, which contain Mr Wheatley's examination of the mercantile system, and exhaust the main part of his design, we have little hesitation in giving it as our opinion, that he should not expect to convert one supporter of the old theory, whom the copious and masterly refutation of Dr Smith, and the luminous, though less correct arguments of Mr Hume (apparently more familiar to our author), have failed to undeceive.

The remaining part of Mr Wheatley's work does not require so minute a consideration;—the subjects which it discusses are more concise, and the discussions themselves more consistent. This, however, is the department in which we meet with the greatest portion of error; and the general conclusions are here as unfounded as those of the former chapters were self-evident. The two leading doctrines of Mr Wheatley, in this part of his speculations, are, the rapid progressive depreciation of currency, and the necessity of a reformation in the paper circulation of Great Britain. The former of these topics he has needlessly divided into two discussions, separated by the latter. We shall offer a few remarks on both his theories, in the order just now mentioned.

I. It is well known to our scientific readers, that Dr Smith made use of the average prices of grain, as the most accurate measure of the value of the precious metals at different periods. His reasons for adopting this standard, were partly drawn from his peculiar habit of considering labour as the only measure of value, and partly from those circumstances in the nature of grain, which render it of all commodities the most constantly exchanged, the most frequently compared with money, the most regularly demanded at all times, and the most universally used in all places. The common opinion, that silver had been sinking in value, with more or less rapidity, ever since the Romans left Britain, was therefore examined by Dr Smith, and refuted, upon a comparative view of the money prices of grain. He endeavoured to show, that, as the increase of corn had outstripped the supply of the precious metals before the American mines were discovered, the value of silver was rising previous to that event;—that, since the influx from those mines completely produced their effects upon prices, the value of silver has again begun to rise, or, at least, is by no means falling;—and that all the additions which continually come from thence, are absorbed by newly formed or improved communities; consumed in manufactures; lost during transportation; or carried away to the markets of Asia.

To the conclusions of Dr Simith, Mr Wheatley, who does not appear to have read the celebrated digression concerning the value of silver, and who calls the adoption of corn, as a standard, an *assumption*, opposes the table of prices drawn up by Sir George Shuckburgh Evelyn, which he terms a masterly refutation, and an acquisition highly honourable to the literature of the age. Upon the results of the table, with regard to the constant depreciation of currency since the Norman conquest, our author builds all his arguments. Without any hesitation, he draws the most startling inferences; and never stops a moment to inquire what may be the solidity of the document on which he has founded so lofty a mass of new doctrine.

As money, says he, is now above 25 per cent. less valuable than it was at the end of the American war, a monied income or capital of 400*l.*, has, since that period, become worth less than three. A landlord may raise his rent at the expiration of his leases; but, in the mean time, his fortune is daily decreasing, in proportion to the length of the tenant's bargain. All annuitants in the public funds are becoming poorer; the country nominally gives them the stipulated interest, but in reality only fifteen shillings in the pound, if the money was invested twenty years ago, and not nine shillings, if it was invested at the beginning of the eighteenth century. The salaries of officers are reduced at the same lamentable rate. The value of the capital lent to Government diminishes in the same proportion—a proportion which is rapidly accelerating: But if only the present rate continue, in half a century the whole national debt will be paid off, except one shilling in the pound. Against the injustice of this method of liquidating our debts, Mr Wheatley inveighs with considerable warmth; and expresses his hopes, that instead of continuing devoutly to wish for this great consummation, the eyes of the public will be so far opened, by the calculations of Sir G. Shuckburgh, that the fear of the debt being paid too soon will alone be felt.

Such, though somewhat condensed, is the substance of the two chapters upon the depreciation of currency. They are altogether composed of corollaries to Sir G. Shuckburgh's table; and we conceive that the easiest way of quieting the fears of those who may partake in our author's apprehensions, and of exposing the radical fallacy of his ingenious system, will be to examine this table. It has indeed excited much less notice than it deserves, if it is entitled to the smallest proportion of the confidence thus liberally bestowed by Mr Wheatley.

Sir G. Shuckburgh published his table, in the very valuable paper which he communicated to the Royal Society, upon the methods

methods of ascertaining a standard of weights and measures.* In this inquiry, the table forms a kind of digression; it is casually introduced; it does not seem to be marked by the same accuracy which distinguishes the main body of the paper; the documents are only referred to in the most general way; and, far from appearing to have taken the general views which must influence all speculations about the analysis of price, he does not seem to be aware of the scientific nature of his subject; he prefaces the table by an apology for descending below the dignity of philosophy; addresses it to the historian and antiquary; and though he alludes to the writings of Smith and Steuart, yet he appears only to have consulted them in order to pick up detached sums and dates.

The first column gives those years (that is, *single years*) from 1050 to 1795, for which he has lists of prices: the next gives the average price of wheat; the next twelve give the prices of twelve other articles: then follows a column with the mean prices of these articles; a column with the prices of husbandry labour, and another with those of beef and mutton. The remaining columns exhibit the comparative view of the value of money, according to these various prices in the *seven* years for which alone he has tolerably full lists of prices, viz. 1050, 1350, 1550, 1675, 1740, 1760, and 1795. And, from the results of this comparison for these few detached years, he forms, by interpolation, his table of depreciation.

Now, it must be observed, in the first place, that the prices are only obtained from the averages of single years, and that of these there are only six, beside the year 1550, which is assumed as a standard. This is a radical objection to the whole calculation. We know well how much prices vary from year to year; and how difficult it is to find any lists of them in ancient authors, unless when the motive for recording them was the extraordinary cheapness or dearth. It is plain, too, that besides variations from scarcity, different circumstances of a local or temporary nature operate at particular periods, to raise or depress the prices of commodities. Thus, it actually happens that the three last of the seven years were seasons of extensive warfare, and that two of these were years of uncommon scarcity, as well as foreign war. The consequences of forming a calculation from single years, may be perceived in the erroneous conclusions to which the column of corn prices would lead us. The price of wheat for 1350, is the very same with that for 1550, according to Sir George Shuckburgh's own account; yet Dr Smith has clearly proved, not from the state of the corn market for two single years, but from a variety of general tests, corroborated also by a series

of successive facts, that during this very interval the money price of wheat was regularly falling from twenty to ten shillings the quarter.

But farther, the lists of prices in the different years are not equally complete : the mean value of money is estimated from five articles only, together with wheat in 1050, the first year of the series ; and from eight articles, together with wheat and day labour in 1350. Two of the twelve miscellaneous articles are, ale and small beer ; commodities of which the prices are extremely complex, and influenced indeed by the operation of direct taxes. According to the table, the price of the former doubled between 1650 and 1675, while that of wheat fell in the proportion of eleven to nine. The price of beef and mutton increased between 1740 and 1760, in the proportion of two to three. During the same interval, the prices of oxen, cows, and sheep, scarcely augmented sensibly ; the rise was only in the proportion of three hundred and forty-three to three hundred and forty-seven.

Some inferences may be drawn from the table, which are in our apprehension equivalent to a *reductio ad absurdum*. It would follow, for example, from a comparison of the price of labour in husbandry with the price of wheat at different times, that the lower orders were in a better condition a hundred years after the Conquest, than they were during the latter part of the American war. A day's wages could, at the former period, purchase nearly half a bushel of wheat : at the latter period, the same wages could purchase little more than a quartier of a bushel.

As Sir George Shuckburgh has not detailed the particulars of his *data*, or described the methods by which he formed his mean estimates of articles for each year, we cannot decide with respect to the limits within which he may have attained an accurate calculation. But we may be permitted to doubt the possibility of getting tolerably just averages of the prices of such commodities as vary extremely in quality or in quantity, or in both. Of the first kind is cheese, and perhaps malt liquors ; of the second, oxen ; of the third, horses. In consequence of these considerations, we are the less surprised to find that the table of depreciation, rashly constructed, by interpolation, from such scanty and deceitful materials, is inconsistent with some of the very *data* which are given in the larger table, but not used in the calculation. The value of money for 1550 being 100, its value for 1150, by the interpolation table, is 43. But if its value is calculated from the prices of cattle in the larger table, it is only 33 ; and from the prices of cattle and wheat together only 31. The one table gives 88 for the value in 1450 ; the other gives 100 or 95, according as we take the price of cattle singly, or that of cattle and wheat together.

But there are various objections of a more general nature to the whole plan of this table, which must already have forced themselves upon our readers. If the depreciation of money is to be estimated from the rise in the money price of commodities, an allowance is necessary for the effects produced upon price, by the variation in demand and supply, which takes place according to the progress of society, and the different circumstances of its situation. If articles of various kinds are differently affected by these changes, the average of the whole variations of money price will certainly not give any approximation to the variations of the value of money. If one article has grown cheaper, in consequence of improvements in the mode of raising or manufacturing it, and another has grown dearer in consequence of a decreasing demand, and diminished attention to its production or fabric, although we should admit that specie has all along been growing more plentiful, so as to counteract the effects of the former circumstances, and to assist those of the latter, the medium of the change produced in both cases will evidently furnish no document of any such increase of specie. It would be absurd, therefore, to estimate the proportion of this increase, by averaging the contrary effects of opposite circumstances altogether independent of the state of currency; or, which is the same thing, to take a medium between an increasing and decreasing series of prices, as a test of the variations in the standard of money. The same remark may be made with respect to averages of increasing series of prices, and prices which are stationary, or which alternately increase and decrease. Yet, in the table of Sir George Shuckburgh, some of the articles are nearly stationary, as wheat; others most rapidly increase, as cattle; others, as poultry, first increase, and then decrease. If wheat and malt liquors are assumed as *criteria*, while their circumstances vary according to laws so different from those which affect the other commodities, it seems difficult to discover why other articles, such as various manufactures, should not be admitted to influence the calculation, since they are much more similar to grain and liquors, than they are to the produce of pasture land. With respect to the value of money in a larger sense; the quantity of comforts and conveniences which it can purchase, has surely been, upon the whole, greatly increased during the period which has elapsed since the discovery of the American mines produced their greatest effect. Many of the necessaries of life have also become cheaper; and some commodities have been disclosed to us, which may be substituted for those necessities.

Taking this complex view of the subject, (and we can scarcely venture to think that any other is compatible with the nature

of the question, at all events, we are sure that nothing like proportions can be ascertained in so great a mixture of causes), it should seem that the value of money has, upon the whole, not decreased in any *ratio* similar to that of Sir George Shuckburgh's table, even admitting his *data* to have been sufficiently extensive, and his mode of computation quite correct. This supposed fact, of the great depreciation of money, is one of those which may be safely admitted, only in so far as they can be accounted for. The continued influx from the American mines, has been demonstrated by Dr Smith to be quite inadequate to produce any progressive effects upon the general prices of commodities in the European commonwealth. No one now conceives it possible to effect any partial rise of prices by the increase of specie currency. The augmentation of paper money is proposed by Mr Wheatley as the cause of that enormous depreciation which he maintains, or rather assumes, to have taken place. But this is both inconsistent with the facts on which his speculations are founded, and repugnant to more general principles. It is inconsistent with the facts; because, according to Sir George Shuckburgh's table, the rate of depreciation was much more rapid during the century after the Conquest, than during the century after the Restoration; during the period when neither new mines were discovered, nor paper currency existed, than during the period when, according to Mr Wheatley, the effects of the newly discovered mines were succeeded by the still more powerful influence of the paper system*. The explanation of the supposed rapid decrease, by the effects of paper currency, is no less inconsistent with the most obvious views of the manner in which the general depreciation of currency is effected by the disproportionate issue of paper. For if that issue becomes so great, as to cause a rapid depreciation, the market price of the precious metals must rise proportionably above their mint price, and the specie must either be withdrawn from circulation altogether, or a permanent discount must be established between coin and paper currency: neither of which effects it is pretended has taken place.

It is impossible, therefore, to account for the supposed depreciation upon any principle hitherto proposed; and we have endeavoured to shew, that the evidence upon which the supposition rests, is of the most flimsy and suspicious nature. There can remain

* We must attend, in this estimate, to the period between 1675 and 1760, and not to the period ending 1795 or 1800. All the numbers after 1760 are interpolated by the aid of the mean for 1795; a year of such extraordinary scarcity, according to the table itself, that the average price of wheat was nearly double its medium price in 1780.

remain no doubt, then, that the conclusion must be given up which Mr Wheatley has confidently built on such grounds; and we may add, that even if the whole extent of the *data* were admitted, the fallacy of some positions would remain uncontested. It would still, for example, be erroneous to consider the gradual extinction of the national debt, by the depreciation of currency, as a breach of public faith, or to omit the consideration of those changes confessedly beneficial to annuitants, which are daily taking place in the price of various commodities, or to rank the adjustment of wages among the duties of the legislator, as Mr Wheatley very distinctly does in p. 196.

II. The other fallacies which we conceive our author has committed, upon the subject of paper currency, are by no means so remarkable, either for novelty or boldness, as that which we have just now been examining. The excess of paper he imputes to the progress of taxation; and, after many eulogiums upon the constitution of the Bank of England, while it remained the sole regulator of the paper circulation of the country, he ascribes the difficulties under which the Bank has laboured, as well as the whole commercial and financial embarrassments of the nation, during the late war, to the increase of country banks, and the permission of their notes. These banks, he contends, in times of tranquillity, enlarge their issues too much; and, in times of alarm, contract them to a proportionable degree. Their notes are, in such emergencies, more liable to suspicion than bank paper. The effects of the distrust excited by these, reaches the Bank, whose issues are thus extended in consequence of the country paper being depreciated, as they are contracted from its redundancy in prosperous times. The same redundancy, he adds, increases all those bad effects of paper currency, which we have already attended to. In order to render this reasoning conclusive, Mr Wheatley must prove,

First of all, That the right of engaging in an important department of trade, ought to be confined by Government to one great mercantile company, merely because private individuals may over-trade in this, as in every other line.

Secondly, That the trade of banking is so very peculiar in its nature, as to destroy all prudence, and even to obliterate the fear of failure, in those who undertake it.

Thirdly, That the Bank directors are likely to know the credit of those whom they deal with, better than the merchants in country towns know that of their customers; and are likely to superintend the whole circulation of the community more accurately of themselves, in the metropolis, where they have each separate concerns, than when assisted by the vigilance of four hundred agents in different quarters, whose lives are devoted to the task.

*Last*ly,

Lastly. That the central bank has not a sufficient controul over all country banks, when at every time its notes bear to theirs the same relation that specie bears to its own ; more particularly, when its obligation to pay in specie has been suspended, without any analogous suspension in favour of the country banks. It is indeed absurd in the extreme, at present to complain of the country banks increasing the paper currency beyond its just bounds. Until they also shall be absolved from the obligation to fulfil their contracts, no advocate for the Bank of England ought to hazard an allusion of this kind. These establishments still remain under the various checks, which secure the honesty, and quicken the prudence of every private trader. They have the most powerful inducements to pursue the line of conduct most beneficial to the public, and the best means of discovering the direction in which that line runs. To expect, from their thoughtlessness and avarice, a general depreciation of the currency, by a universal over-issue of notes, would be as ridiculous, as to suppose that the Oporto merchants will ever deluge the country with port wine.

Before taking leave of Mr Wheatley's treatise, we must again express our disappointment at the scantiness of the new matter which it displays, upon so various and important a field of inquiry, after the splendid promises of the preface. The minuteness, however, with which we have gone through almost all his reasonings, is a sufficient proof that we value his performance more than the common ephemeral publications on political topics. And as he has evidently paid considerable attention to a subject, removed, by its manifold difficulties, above the reach of ordinary reasoners, we trust that he will continue to prosecute his speculations, until he shall make some real addition to this important branch of science. The style of the tract is extremely careless, and in many parts tainted with a disagreeable vulgarity of expression. It is frequently deficient in grammatical purity ; and for these imperfections, it only atones, by a very laudable sacrifice of all pretensions to ornament. But, in a work of this nature, these are very trivial faults ; and we should not have even thus shortly hinted at them, had we met with much to gratify us in the more substantial parts of the entertainment.

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No. VI. will be Published on Wednesday, 25th January 1804.

CONTENTS of No. VI.

Akr. I. Stewart's Account of the Life and Writings of Dr Thomas Reid, F. R. S. Edin.	p. 269
II. Marc Auguste Pictet, <i>Voyage de Trois Mois en Angleterre, en Ecosse, et en Irlande</i>	287
III. L. A. Emmerling, <i>Lehrbuch der Mineralogie</i>	295
IV. Faber's Dissertation on the Mysteries of the Cabiri	313
V. Karamzin's Travels from Moscow through Prussia, Germany, Switzerland, France, and England	321
VI. Dr Cririe's Scotch Scenery, or Sketches in Verse, descriptive of Scents in the Highlands	328
VII. <i>Voyage en Islande, fait par Ordre de sa Majesté Danoise</i>	334
VIII. Lichtenberg, <i>Vermischte Schriften, nach dessen tote herausgegeben</i>	343
IX. Dr Winterbottom's Account of Sierra Leone	355
X. Turner's History of the Anglo-Saxons	360
XI. Good's Memoirs of the Life and Writings of the Rev. Alexander Geddes, LL.D.	374
XII. Izarn, <i>des Pierres tombées du Ciel</i>	386
XIII. Donna Agnese's Analytical Institutions	401
XIV. Nicolas et Gueudeville, <i>Récherches et Expériences Médicales et Chimiques sur le Diabète Sucré</i>	410
XV. Clarke's Progress of Maritime Discovery	422
XVI. Godwin's Life of Geoffrey Chaucer, the early English Poet	437
XVII. Hatchett's Experiments on the various Alloys, Specific Gravity, and comparative Wear of Gold Coin	452
XVIII. Pharmacopœia Collegii Regii Edinburgensis	457
XIX. The Substance of a Speech intended to have been spoken in the House of Lords, by the Bishop of Landaff, on 2nd November 1803	468
XX. Stephens's History of the late War	486
XXI. Brochant, <i>Traité élémentaire de Minéralogie, suivant les principes du Professeur Werner</i>	493
Quarterly List of New Publications	498

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P. 397. line 27. *for* Tchangire, *read* Jehangire.

— — 30. *for* amnil, *read* aumil.

— — 32. *for* having found, &c. *read* finding the ground still hot and burnt up, &c.

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N^{o.} VI.

ART. I. *Account of the Life and Writings of Thomas Reid, D. D. F. R. S. Edinburgh, late Professor of Moral Philosophy in the University of Glasgow.* By Dugald Stewart, F. R. S. Edinburgh: Read at different Meetings of the Royal Society of Edinburgh. 8vo. pp. 225. Edinburgh and London. 1803.

THIS Work is divided into three Sections; the first containing the history of Dr Reid's life and occupations from his birth till the date of his latest publication; the second consisting of observations on the spirit and scope of his philosophy; and the last bringing down the narrative to the time of his death, and concluding with a general view of his personal character and dispositions.

Of these three sections, the first perhaps is the least interesting. The retired life of a contemplative philosopher, is generally very barren of those incidents that furnish materials for biography; and it does not appear that any other memorial has been preserved of the order or progress of Dr Reid's studies, than that which may be found in some passages of his own publications. We pass over Dr Reid's genealogy; for though there appear to have been several authors in the line of his ancestors, we do not find that any of them attained such a degree of celebrity as to have rendered the name familiar to the lovers of learning. His father was a clergyman in the North of Scotland; and he was himself educated at the Marischal College of Aberdeen, where he was very soon nominated to the office of Librarian. At this period, he was more remarkable for industry and modesty, than for any extraordinary vigour of understanding; and showed a great partiality for mathematical studies, and for the doctrines of the Newtonian philosophy, which were then only beginning to be taught in the northern universities. In 1737, he was presented to a living in the neighbourhood of Aberdeen, where he at first experienced the most violent opposition

fition from his parishioners; but succeeded so completely in overcoming their animosity, by his invariable mildness and beneficence, that when he was soon after called to a different situation, the very individuals who had instigated the outrages with which he was received, followed him, on his departure, with their blessings and tears. ‘ We fought *against* Dr Reid’ (said they to their present pastor, from whom Mr Stewart has the anecdote) ‘ when he came; and we would have fought *for* him when he went away.’ In this retirement Dr Reid produced his first publication; which, though of no extraordinary interest or importance in itself, yet serves to mark the vigilance with which he applied himself, from the beginning, to the detection of loose and illusive reasoning. It was a paper in the *Philosophical Transactions of London* for the year 1748, and was entitled, ‘ An Essay on Quantity, occasioned by reading a treatise, in which simple and compound ratios are applied to virtue and merit.’ The treatise alluded to, Mr Stewart informs us, was Dr Hucheson’s Inquiry into the Origin of our Ideas of Beauty and Virtue, in which the author had attempted to subject the degrees of merit to the laws of mathematical proportion, and which enjoyed at that time a very high reputation all over Scotland.

In the year 1752, Dr Reid was elected Professor of Philosophy in the King’s College of Aberdeen; a society which had then to boast of the names of Gregory and Campbell, Gerard and Beattie, and in which Dr Reid found both the occupations that were worthy of him, and the relaxations in which he delighted. In 1764, after mature deliberation, he gave to the world his ‘ Inquiry into the Human Mind;’ in which he explains those principles that had been suggested to him more than twenty years before, by the perusal of Mr Hume’s *Treatise of Human Nature*. The process of reasoning by which he was led to call in question the first principles of the ideal theory, is pretty plainly delineated in the work itself; yet there is something peculiarly deserving of attention in the following passage of Mr Stewart’s narrative.

‘ In his *Essays on the Intellectual Powers*, he acknowledges, that, in his youth, he had, without examination, admitted the established opinions on which Mr Hume’s system of scepticism was raised; and that it was the consequences which these opinions seemed to involve, which roused his suspicions concerning their truth. “ If I may presume,” (says he,) “ to speak my own sentiments, I once believed the doctrine of Ideas so firmly, as to embrace the whole of Berkeley’s system along with it; till finding other consequences to follow from it, which gave me more uneasiness than the want of a material world, it came into my mind, more than forty years ago, to put the question, What evidence have

have I for this doctrine, that all the objects of my knowledge are ideas in my own mind? From that time to the present, I have been candidly and impartially, as I think, seeking for the evidence of this principle; but can find none, excepting the authority of philosophers."

" In following the train of Dr Reid's researches, this last extract merits attention; as it contains an explicit avowal, on his own part, that, at one period of his life, he had been led, by Berkeley's reasonings, to abandon the belief of the existence of *matter*. The avowal does honour to his candour, and the fact reflects no discredit on his sagacity. The truth is, that this article of the Berkleyian system, however contrary to the conclusions of a sounder philosophy, was the error of no common mind. Considered in contrast with that theory of materialism, which the excellent author was anxious to supplant, it possessed important advantages, not only in its tendency, but in its scientific consistency; and it afforded a proof, wherever it met with a favourable reception, of an understanding superior to those casual associations, which, in the apprehensions of most men, blend indissolubly the phenomena of thought with the objects of external perception. It is recorded as a saying of M. Turgot, (whose philosophical opinions in some important points approached very nearly to those of Dr Reid), That " he who had never doubted of the existence of matter, might be assured he had no turn for metaphysical disquisitions." p. 27-30.

The importance which he assigned to this part of his speculations, and the singular modesty and candour with which he continued to speak of his own achievements, after he had in a great measure effected a complete revolution in this branch of philosophy, may be discovered in the following passage of a letter to Dr Gregory, in 1790, which is inserted in another part of this publication.

" It would be want of candour not to own, that I think there is some merit in what you are pleased to call *my philosophy*; but I think it lies chiefly in having called in question the common theory of *Ideas* or *Images of things in the mind* being the only objects of thought; a theory founded on natural prejudices, and so universally received as to be interwoven with the structure of language. Yet were I to give you a detail of what led me to call in question this theory, after I had long held it as self-evident and unquestionable, you would think, as I do, that there was much of chance in the matter. The discovery was the birth of time, not of genius; and Berkeley and Hume did more to bring it to light than the man that hit upon it. I think there is hardly any thing that can be called *mine* in the philosophy of the mind, which does not follow with ease from the detection of this prejudice.

" I must, therefore, beg of you, most earnestly, to make no complaint in my favour to the disparagement of my predecessors in the same pursuit. I can truly say of them, and shall always avow, what you are pleased to say of me, that but for the assistance I have received from their writings,

writings, I never could have wrote or thought what I have done." p. 122-124.

The "Inquiry into the Human Mind" excited, as was to have been expected, a great deal of opposition from the partizans of the established system; but attracted, at the same time, the admiration of many of the most sagacious philosophers of the time. From the University of Glasgow, in particular, the talents which it indicated obtained a very unequivocal testimony of approbation; the author having been invited, in 1765, to the professorship of Moral Philosophy, then vacant by the resignation of Mr Smith. This offer Dr Reid accepted, though not without considerable reluctance; and continued in the regular discharge of his academical duties till the year 1781, when he withdrew altogether from the public labour of teaching, and devoted himself entirely to the composition of those volumes in which he was to bequeath his system of philosophy to posterity. In 1785, he published his "Essays on the Intellectual Powers," and completed his plan in 1788, by the publication of the "Essays on the Active Powers."

At this period, which may be said to have terminated the literary career of this eminent philosopher, Mr Stewart suspends the prosecution of his narrative, for the purpose of laying before his readers, in a connected and distinct form, the criticisms and observations which he has thought it most important to make on the spirit and scope of Dr Reid's philosophy.

In proceeding to the consideration of this part of Mr Stewart's performance, we feel ourselves divided between a suspicion of the author's partiality to the memory and the tenets of his venerable instructor, and an unfeigned deference and respect for every thing that Mr Stewart may deliver upon a subject which he has studied so profoundly. We hope that no one will suspect us of any design to insinuate that Mr Stewart has represented the doctrines of Dr Reid in any other light than that in which they really appeared to him: But it is not always easy to point out the imperfections of a system, to which the mind has been long habituated; and in criticising the works of a departed friend, we neither expect nor wish for that severe impartiality which may be exacted as a duty from a stranger. Although it is impossible, therefore, to entertain greater respect for any names than we do for those that are united in the title of this work, we must be permitted to say, that there are several things with which we cannot agree, both in the system of Dr Reid, and in Mr Stewart's elucidation and defence of it.

The present section begins with a remark, the justice of which we are not at all disposed to controvert, that the distinguishing feature,

feature of Dr Reid's philosophy is the systematical steadiness with which he has adhered to the course of ~~correct~~ observation, and the admirable self-command by which he has confined himself to the clear statement of the facts he has collected. Mr Stewart, however, follows up this observation with a warm encomium on the inductive philosophy of Lord Bacon, and a copious and eloquent exposition of the incalculable utility and advantage that may be expected from applying to the science of mind those sound rules of experimental philosophy that have undoubtedly guided us to all the splendid improvements in modern physics. From the time indeed that Mr Hume published his treatise of human nature, down to the latest speculations of Condorcet and Mr Stewart, we have observed this to be a favourite topic with all metaphysical writers, and that those who have differed in almost every thing else, have agreed in magnifying the importance of such inquiries, and in predicting the approach of some striking improvement in the manner of conducting them.

Now, in these speculations we cannot help suspecting that those philosophers have been misled in a considerable degree by a false analogy, and that their zeal for the promotion of their favourite studies has led them to form expectations somewhat sanguine and extravagant, both as to their substantial utility and as to the possibility of their ultimate improvement. In reality, it does not appear to us that any great advancement in our knowledge of the operations of mind is to be expected from any improvement in the plan of investigation, or that the condition of mankind is likely to derive any great benefit from the cultivation of this interesting but abstracted study.

Inductive philosophy, or that which proceeds upon the careful observation of facts, may be applied to two different classes of phenomena. The first are those that can be made the subject of proper experiment, where the substances are actually in our power, and the judgement and artifice of the inquirer can be effectually employed to arrange and combine them in such a way as to disclose their most hidden properties and relations. The other class of phenomena are those that occur in substances that are placed altogether beyond our reach, the order and succession of which we are generally unable to controul, and as to which we can do little more than collect and record the laws by which they appear to be governed. These substances are not the subject of *experiment*, but of *observation*; and the knowledge we may obtain, by carefully watching their variations, is of a kind that does not directly increase the power which we might otherwise have had over them. It seems evident, however, that it is

principally in the former of these departments, or the strict experimental philosophy, that those splendid improvements have been made, which have erected so vast a trophy to the prospective genius of Bacon. The astronomy of Sir Isaac Newton is no exception to this general remark : All that mere observation could do to determine the movements of the heavenly bodies, had been accomplished by the star-gazers who preceded him ; and the law of gravitation, which he afterwards applied to the planetary system, was first calculated and ascertained by experiments performed upon substances which were entirely at his disposal.

It will scarcely be denied, either, that it is almost exclusively to this department of experiment that Lord Bacon has directed the attention of his followers. His fundamental maxim is, that knowledge is power ; and the great problem which he constantly aims at resolving is, in what manner the nature of any substance or quality may, by experiment, be so detected and ascertained, as to enable us to manage it at our pleasure. The greater part of the *novum organum* accordingly is taken up with rules and examples for contriving and conducting experiments ; and the chief advantage which he seems to have expected from the progress of these inquiries, appears to be centred in the enlargement of man's dominion over the material universe which he inhabits. To the mere observer, therefore, his laws of philosophy, except where they are prohibitory laws, have but little application ; and to such an inquirer, the rewards of his philosophy, scarcely appear to have been promised. It is evident indeed that no direct utility can result from the most accurate observation of occurrences which we cannot controul, and that for the uses to which such observation may afterwards be turned, we are indebted not so much to the observer, as to the person who discovered the application. It also appears to be pretty evident that in the art of observation itself, no very great or fundamental improvement can be expected. Vigilance and attention are all that can ever be required in an observer ; and though a talent for methodical arrangement may facilitate to others the study of the facts that have been collected, it does not appear how our knowledge of these facts can be increased by any new method of describing them. Facts that we are unable to modify or direct, in short, can only be the objects of observation ; and observation can only inform us that they exist, and that their succession appears to be governed by certain general laws.

In the proper experimental philosophy, every acquisition of knowledge is an increase of power ; because the knowledge is necessarily derived from some intentional disposition of materials, which we may always command in the same manner. In the philosophy

philosophy of observation, it is merely a gratification of our curiosity. By experiment, too, we generally acquire a pretty correct knowledge of the causes of the phenomena we produce, as we ourselves distribute and arrange the circumstances upon which they depend; while in matters of mere observation, the assignment of causes must always be in a good degree conjectural, inasmuch as we have no means of separating the preceding phenomena, or deciding otherwise than by analogy to which of them the succeeding event is to be attributed.

Now, it appears to us to be pretty evident that the phenomena of the human mind are almost all of the latter description. We feel, and perceive, and remember, without any purpose or contrivance of ours, and have evidently no power over the mechanism by which those functions are performed. We may observe and distinguish those operations of mind, indeed, with more or less attention or exactness; but we cannot subject them to experiment, nor alter their nature by any process of investigation. We cannot decompose our perceptions in a crucible, nor divide our sensations with a prism; nor can we, by art and contrivance, produce any combination of thoughts or emotions, besides those with which all men have been provided by nature. No metaphysician expects by analysis to discover a new power, or to excite a new sensation in the mind, as a chemist discovers a new earth or a new metal; nor can he hope, by any process of synthesis, to exhibit a mental combination different from any that nature has produced in the minds of other persons. The science of metaphysics, therefore, depends upon observation, and not upon experiment; and all reasonings upon mind proceed accordingly upon a reference to that general observation which all men are supposed to have made, and not to any particular experiments, which are known only to the inventor.—The province of philosophy, in this department, therefore, is the province of observation only; and in this department the greater part of that code of laws which Bacon has provided for the regulation of experimental induction, is plainly without authority. In metaphysics, certainly knowledge is not power; and instead of producing new phenomena to elucidate the old by well-contrived and well-conducted experiments, the most diligent inquirer can do no more than register and arrange the appearances, which he can neither account for, nor control.

But though our power can in no case be directly increased by the most vigilant and correct observation, our knowledge may often be very greatly extended by it. In the science of mind, however, we are inclined to suspect that this is not the case. From the very nature of the subject, it seems necessarily to fol-

low, that all men must be practically familiar with all the functions and qualities of their minds, and with almost all the laws by which they appear to be governed. Every one knows exactly what it is to perceive and to feel, to remember, imagine, and believe ; and though he may not always apply the words that denote these operations with perfect propriety, it is not possible to suppose that any one is ignorant of the things. Even those laws of thought, or connexions of mental operation, that are not so commonly stated in words, appear to be universally known, and are found to regulate the practice of those who never thought of enunciating them in an abstract proposition. A man who never heard it asserted that memory depends upon attention, yet attends with uncommon care to any thing that he wishes to remember ; and accounts for his forgetfulness, by acknowledging that he had paid no attention. A groom, who never heard of the association of ideas, feeds the young war-horse to the sound of a drum ; and the unphilosophical artists that tame elephants and train dancing dogs, proceed upon the same obvious and admitted principle. The truth is, that as we only know the existence of mind by the exercise of its functions according to certain laws, it is impossible that any one should ever discover or bring to light any functions or any laws of which men would admit the existence, unless they were previously convinced of their operations on themselves. A philosopher may be the first to state these laws, and to describe their operation distinctly in words ; but men must be already familiarly acquainted with them in reality, before they can assent to the justice of his descriptions.

For these reasons, we cannot help thinking that the labours of the metaphysician, instead of being assimilated to those of the chemist or experimental philosopher, might, with less impropriety, be compared to those of the grammarian who arranges into technical order the words of a language which is spoken familiarly by all his readers ; or of the artist who exhibits to them a correct map of a district with every part of which they were previously acquainted. We acquire a perfect knowledge of our own minds without study or exertion, just as we acquire a perfect knowledge of our native language or our native parish ; yet we cannot, without much study and reflection, compose a grammar of the one, or a map of the other. To arrange in correct order all the particulars of our practical knowledge, and to set down, without omission and without distortion, every thing that we actually know upon a subject, requires a power of abstraction, selection, and disposition, that falls to the lot of but few. In the science of mind, perhaps, more of those qualities are required than in any other ; but it is not the less true of this, than

of all the rest, that the materials of the description must always be derived from a previous acquaintance with the subject—that nothing can be set down technically that was not practically known—and that no substantial addition is made to our knowledge by a scientific distribution of its particulars. After such a systematic arrangement has been introduced, and a correct nomenclature applied, we may indeed conceive more clearly, and will certainly describe more justly, the nature and extent of our information; but our information itself is not really increased, and the consciousness by which we are supplied with all the materials of our reflections, does not become more productive by this disposition of its contributions.

But though we have been induced in this way to express our scepticism, both as to the probable improvement and practical utility of metaphysical speculations, we would by no means be understood as having asserted that these studies are absolutely without interest or importance. With regard to perception, indeed, and some of the other primary functions of mind, it seems now to be admitted, that philosophy can be of no use to us, and that the profoundest reasonings lead us back to the creed and the ignorance of the vulgar. As to the laws of association, however, the case is somewhat different; instances of the application of such laws are indeed familiar to every one, and there are few who do not of themselves arrive at some imperfect conception of their general limits and application; but that they are sooner learned, and more steadily and extensively applied when our observations are assisted by the lessons of a judicious instructor, seems scarcely to admit of doubt; and though there are no errors of opinion perhaps that may not be corrected without the help of metaphysical principles, it cannot be disputed, that an habitual acquaintance with these principles leads us more directly to the source of such errors, and enables us more readily to explain and correct some of the most formidable aberrations of human understanding. After all, perhaps, the chief value of such speculations will be found to consist in the exercise which they afford to the faculties, and the delight which is produced by the consciousness of intellectual exertion. Upon this subject, we gladly borrow from Mr Stewart the following admirable quotations.

' An author well qualified to judge, from his own experience, of whatever conduces to invigorate or to embellish the understanding, has beautifully remarked, that " by turning the soul inward on itself, its forces are concentrated, and are fitted for stronger and bolder flights of science; and that, in such pursuits, whether we take, or whether we lose the game, the chase is certainly of service." In this respect, the philosophy of the mind (abstracting entirely from that preeminence which

which belongs to it in consequence of its practical applications) may claim a distinguished rank among those preparatory disciplines, which another writer of equal talents has happily compared to "the crops which are raised, not for the sake of the harvest, but to be ploughed in as a dressing to the land." p. 166. 167.

In following out his observations on the scope and spirit of Dr Reid's philosophy, Mr Stewart does not present his readers with any general outline or summary of the peculiar doctrines by which it is principally distinguished. This part of the book indeed appears to be addressed almost exclusively to those who are in some degree initiated in the studies of which it treats, and consists of a vindication of Dr Reid's philosophy from the most important objections that had been proposed to it by his antagonists. The first is made by the materialist, and is directed against the gratuitous assumption of the existence of mind. To this Mr Stewart answers with irresistible force, that the philosophy of Dr Reid has in reality no concern with the theories that may be formed as to the *causes* of our mental operations, but is entirely confined to the investigation of those phenomena which are known to us by internal consciousness, and not by external perception. On the theory of Materialism itself, he makes some admirable observations: and after having stated the perceptible improvement that has lately taken place in the method of considering those intellectual phenomena, he concludes with the following judicious and eloquent observations.

"The authors who form the most conspicuous exceptions to this gradual progress, consist chiefly of men, whose errors may be easily accounted for, by the prejudices connected with their circumscribed habits of observation and inquiry;—of Physiologists, accustomed to attend to that part alone of the human frame, which the knife of the Anatomist can lay open; or of Chemists, who enter on the analysis of Thought, fresh from the decompositions of the laboratory; carrying into the Theory of Mind itself (what Bacon expressively calls) "the smoke and tarnish of the furnace." Of the value of such pursuits, none can think more highly than myself; but I must be allowed to observe, that the most distinguished preeminence in them does not necessarily imply a capacity of collected and abstracted reflection, or an understanding superior to the prejudices of early association, and the illusions of popular language. I will not go so far as Cicero, when he ascribes to those who possess these advantages, a more than ordinary vigour of intellect: "*Magni est ingenii revocare mentem a sensibus, et cogitationem a confusione abducere.*" I would only claim for them, the merit of patient and cautious research; and would exact from their antagonists the same qualifications." p. 110—111.

The second great objection that has been made to the doctrines of Dr Reid is, that they tend to damp the ardour of philosophical

phical curiosity, by stating as ultimate facts many phenomena which might be resolved into simpler principles, and perplex the science of mind with an unnecessary multitude of internal and unaccountable properties.* It is certainly better to damp the ardour of philosophers, by exposing their errors and convincing them of their ignorance, than to gratify it by subscribing to their blunders. It is one step towards a true explanation of any phenomenon, to expose the fallacy of an erroneous one; and though the contemplation of our failures may render us more diffident of success, it will probably teach us some lessons that are far from diminishing our chance of obtaining it. To the charge of multiplying unnecessarily the original and instinctive principles of our nature, Mr Stewart has not made quite so satisfactory an answer. The greater part of what he says indeed upon this subject, is rather an apology for Dr Reid, than a complete justification of him. In his classification of the active powers, he admits that Dr Reid has multiplied, without necessity, the number of our original affections, and that in the other parts of his doctrine, he has manifested a leaning to the same extreme. It would have been better, perhaps, if Mr Stewart had rested the defence of his author upon those concessions, and upon the general reasoning with which they are very skilfully associated to prove the superior safety and prudence of this tardiness to generalize and assimilate; for, with all our deference for the talents of the author, we find it impossible to agree with him in those particular instances in which he has endeavoured to expose the injustice of the accusation. After all that Mr Stewart has said, we can still see no reason for admitting a principle of credulity, or a principle of veracity, in human nature; nor can we discover any sort of evidence for the existence of an instinctive power of interpreting natural signs.

Dr Reid's only reason for maintaining that the belief we commonly give to the testimony of others is not derived from reasoning and experience, is, that this credulity is more apparent and excessive in children, than in those whose experience and reason is mature. Now, to this it seems obvious to answer, that the experience of children, though not extensive, is almost always entirely *uniform* in favour of the veracity of those about them. There can scarcely be any temptation to utter falsehood to an infant; and even if that should happen, there is seldom such a degree of memory or attention as would be necessary for its detection. In all cases besides, it is admitted that children learn

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* We have here classed under one head the objections which Mr Stewart distinguishes into two.

the general rule, before they begin to attend to the exceptions ; and it will not be denied that the general rule is, that there is a connexion between the assertions of mankind and the realities of which they are speaking. Falsehood is like those irregularities in the construction of a language, which children always overlook for the sake of the general analogy.

The principle of *veracity* is in the same situation. Men speak and assert, in order to accomplish some purpose ; but if they did not generally speak truth, their assertions would answer no purpose at all—not even that of deception. To speak falsehood, too, even if we could suppose it to be done without a motive, requires a certain exercise of imagination and the inventive faculties, which is not without labour : truth is suggested spontaneously, not by the principle of veracity, but by our consciousness and memory. Even if we were not rational creatures, therefore, but spoke merely as a consequence of our sensations, we would speak truth much oftener than falsehood ; but being rational, and addressing ourselves to other beings with a view of influencing their conduct or opinion, it follows as a matter of necessity, that we must almost always speak truth : even the principle of credulity would not otherwise be sufficient to render it worth while for us to speak at all.

With regard to the principle by which we are enabled to interpret the natural signs of the passions, and of other connected events, we cannot help entertaining a similar scepticism. There is no evidence, we think, for the existence of such a principle ; and all the phenomena may be solved by the help of memory and the association of ideas. The ‘inductive principle’ is very nearly in the same predicament ; though the full discussion of the argument that might be maintained upon that subject, would occupy more room than we can now spare.

After some very excellent observations on the nature and the functions of instinct, Mr Stewart proceeds to consider, as the last great objection to Dr Reid’s philosophy, the alleged tendency of his doctrines, on the subject of *common sense*, to sanction an appeal from the decisions of the learned to the voice of the multitude. Mr Stewart, with great candour, admits that the phrase was unluckily chosen, and that it has not always been employed with perfect accuracy, either by Dr Reid or his followers ; but he maintains, that the greater part of the truths which Dr Reid has referred to this authority, are in reality originally and unaccountably impressed on the human understanding, and are necessarily implied in the greater part of its operations. These, he says, may be better denominated, ‘Fundamental laws of belief ;’ and he exemplifies them by such propositions

sitions as the following: 'I am the same person to-day that I was yesterday.—The material world has a real existence.—The future course of nature will resemble the past.' We shall have occasion immediately to offer a few observations on some of these propositions.

With these observations Mr Stewart concludes his defence of Dr Reid's philosophy: but we cannot help thinking that there was room for a farther vindication, and that some objections may be stated to the system in question, as formidable as any of those which Mr Stewart has endeavoured to obviate. We shall allude very shortly to those that appear the most obvious and important. Dr Reid's great achievement was undoubtedly the subversion of the Ideal system, or the confutation of that hypothesis which represents the immediate objects of the mind in perception, as certain *images* or *pictures* of external objects conveyed by the senses to the sensorium. This part of his task, it is now generally admitted that he has performed with exemplary diligence and complete success; but we are by no means so entirely satisfied with the uses he has attempted to make of his victory. After considering the subject with some attention, we must confess that we have not been able to perceive how the destruction of the Ideal theory can be held as a demonstration of the real existence of matter, or a confutation of all those reasonings which have brought into question the popular faith upon this subject. The theory of images and pictures, in fact, was in its original state more closely connected with the supposition of a real material prototype, than the theory of direct perception; and the sceptical doubts that have since been suggested, appear to us to be by no means exclusively applicable to the former hypothesis. He who believes that certain forms or images are actually transmitted through the organs of sense to the mind, must believe, at least, in the reality of the organs and the images, and probably in their origin from real external existences. He who is contented with stating that he is conscious of certain sensations and perceptions, by no means assumes the independent existence of matter, and gives a safer account of the phenomena than the idealist.

Dr Reid's sole argument for the real existence of a material world, is founded on the irresistible belief of it that is implied in perception and memory; a belief, the foundations of which, he seems to think, it would be something more than absurd to call in question. Now, the reality of this general persuasion or belief, no one ever attempted to deny. The question is only about its justness or truth. It is conceivable, certainly, in every case, that our belief should be erroneous; and there can be nothing

nothing absurd in suggesting reasons for doubting of its conformity with truth. The obstinacy of our belief, in this instance, and its constant recurrence, even after all our endeavours to familiarize ourselves with the objections that have been made to it, are not absolutely without parallel in the history of the human faculties. All children believe that the earth is at rest, and that the sun and the fixed stars perform a diurnal revolution round it. They also believe that the place which they occupy on the surface is absolutely the uppermost, and that the inhabitants of the opposite surface must be suspended in an inverted position. Now, of this universal, practical, and irresistible belief, all persons of education are easily disabused in speculation, though it influences their ordinary language, and continues, in fact, to be the habitual impression of their minds. In the same way, a Berkleyan might admit the constant recurrence of the illusions of sense, although his speculative reason were sufficiently convinced of their fallacy.

The phenomena of dreaming and of delirium, however, appear to afford a sort of *experimentum crucis* to demonstrate that a real external existence is not necessary to produce sensation and perception in the human mind. Is it utterly absurd and ridiculous to maintain, that all the objects of our thoughts may be ‘ such stuff as dreams are made of ? ’ or that the uniformity of Nature gives us some reason to presume that the perceptions of maniacs and of rational men are manufactured, like their organs, out of the same materials ? There is a species of insanity known among medical men by the epithet *notional*, in which there is frequently no general depravation of the reasoning and judging faculties, but where the disease consists entirely in the patient mistaking the objects of his thought or imagination for real and present existences. The error of his perceptions, in such a case, is only detected by comparing them with the perceptions of other people ; and it is evident that he has just the same reason to impute error to them, as they can have individually for imputing it to him. The majority, indeed, necessarily carries the point as to all practical consequences ; but is there any absurdity in alleging that we have no internal, infallible, and necessary assurance of that in which the internal conviction of an individual must be supported, and may be overruled by the testimony of his fellow-creatures ?

Dr Reid has himself admitted, that ‘ we might probably have been so made, as to have all the perceptions and sensations which we now have, without any impression on our bodily organs at all.’ It is surely altogether as reasonable to say, that we might have had all those perceptions, without the aid or intervention

vention of any material existence at all. Those perceptions might still have been accompanied with a belief, too, that would not have been less universal or irresistible for being utterly without a foundation in reality. In short, our perceptions can never afford any complete or irrefragable proof of the real existence of external things; because it is easy to conceive that we might have such perceptions without them. We do not know, therefore, with certainty, that our perceptions are ever produced by external objects; and in the cases to which we have just alluded, we find perception and its concomitant belief, where we do know with certainty that it is *not* produced by any external existence.

It has been said, however, that we have the same evidence for the existence of the material world, as for that of our own thoughts or conceptions; as we have no reason for believing in the latter, but that we cannot help it; which is equally true of the former. Now, this appears to us to be very inaccurately argued. Whatever we doubt, and whatever we prove, we must plainly begin with consciousness: that alone is certain—all the rest is inference. Does Dr Reid mean to assert, that our perception of external objects is not a necessary preliminary to any proof of their reality, or that our belief in their reality is not founded upon our consciousness of perceiving them? Our perceptions, then, and not the existence of their objects, is what we cannot help believing; and it would be nearly as reasonable to say that we must take all our dreams for realities, because we cannot doubt that we dream, as it is to assert that we have the same evidence for the existence of an external world, as for the existence of the sensations by which it is suggested to our minds.

We dare not venture farther into this subject; yet we cannot abandon it without observing, that the question is entirely a matter of philosophical and abstract speculation, and that by far the most reprehensible passages in Dr Reid's writings, are those in which he has represented it as otherwise. When we consider, indeed, the exemplary candour, and temper, and modesty, with which this excellent man has conducted the whole of his speculations, we cannot help wondering that he should ever have forgotten himself so far as to descend to the vulgar raillery which he has addressed, instead of argument, to the abettors of the Berkleyan hypothesis. The old joke, of the sceptical philosophers running their noses against posts, tumbling into kennels, and being sent to a madhouse, is repeated at least ten times in different parts of Dr Reid's publications, and really seems to have been considered as an objection not less forcible than facetious.

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facetious. Yet Dr Reid surely could not be ignorant that those who have questioned the reality of a material universe, never affected to have perceptions, ideas, and sensations of a different nature from other people. The debate was merely about the origin of these sensations, and could not possibly affect the conduct or feelings of the individual. The sceptic, therefore, who has been taught by experience that certain perceptions are connected with unpleasant sensations, will avoid the occasions of them as carefully as those who look upon the objects of their perceptions as external realities. Notions and sensations he cannot deny to exist; and this limited faith will regulate his conduct exactly in the same manner as the more extensive creed of his antagonists. We are persuaded that Mr Stewart would reject the aid of such an argument for the existence of an external world.

The unexpected length to which these observations have extended, deters us from prosecuting any farther our remarks on Dr Reid's philosophy. The other points in which it appears to us that he has left his system vulnerable are, his explanation of our idea of cause and effect, and his speculations on the question of liberty and necessity. In the former, we cannot help thinking that he has dogmatized, with a degree of confidence which is scarcely justified by the cogency of his arguments, and has endeavoured to draw ridicule on the reasoning of his antagonists, by illustrations that are utterly inapplicable. In the latter, he has made something more than a just use of the prejudices of men and the ambiguity of language, and has more than once been guilty, if we be not mistaken, of what, in a less respectable author, we should not have scrupled to call the most palpable sophistry. We are glad that our duty does not require us to enter into the discussion of this very perplexing controversy; though we may be permitted to remark, that it is somewhat extraordinary to find the dependence of human actions on motives so positively denied by those very philosophers with whom the doctrine of causation is of such high authority.

We proceed now to the last section of Mr Stewart's interesting publication, which contains little more than a short and simple account of the studies and occupations of Dr Reid's latter years, and an admirable delineation of his character. His health had, all his life, been uncommonly vigorous, and, except a slight decay of memory, he appears to have retained all his faculties and affections unimpaired to the age of eighty-seven. A few months before his death, which happened in 1797, he read to a literary society a distinct and philosophical treatise 'on the effects produced by old age on the muscular motions;' thus

persevering

persevering to the last in those habits of self-observation which had constituted the business and the glory of his life.

The character of Dr Reid is drawn by Mr Stewart, in colours particularly lively and attractive. We believe it to be entirely just, at the same time that we are of opinion that there is scarcely any thing wanting in the following passage to complete the picture of a true philosopher and an excellent man.

“ The most prominent features of his character were,—intrepid and inflexible rectitude;—a pure and devoted attachment to truth;—and an entire command (acquired by the unwearied exertions of a long life) over all his passions. Hence, in those parts of his writings where his subject forces him to dispute the conclusions of others, a scrupulous rejection of every expression calculated to irritate those whom he was anxious to convince, and a spirit of liberality and good-humour towards his opponents, from which no asperity on their part could provoke him, for a moment, to deviate.

“ In private life, no man ever maintained, more eminently or more uniformly, the dignity of philosophy; combining, with the most amiable modesty and gentleness, the noblest spirit of independence. The only preferments which he ever enjoyed, he owed to the unsolicited favour of the two learned Bodies who successively adopted him into their number; and the respectable rank which he supported in society, was the well-earned reward of his own academical labours. The studies in which he delighted, were little calculated to draw on him the patronage of the great; and he was unskilled in the art of courting advancement, by “ fashioning his doctrines to the varying hour.”

“ As a philosopher, his genius was more peculiarly characterized by a sound, cautious, distinguishing judgement; by a singular patience and perseverance of thought; and by habits of the most fixed and concentrated attention to his own mental operations;—endowments which, although not the most splendid in the estimation of the multitude, would seem entitled, from the history of science, to rank among the rarest gifts of the mind.

“ With these habits and powers, he united (what does not always accompany them) the curiosity of a naturalist, and the eye of an observer; and, accordingly, his information about every thing relating to physical science, and to the useful arts, was extensive and accurate. His memory for historical details was not so remarkable; and he used sometimes to regret the imperfect degree in which he possessed this faculty. I am inclined, however, to think, that in doing so, he underrated his natural advantages; estimating the strength of memory, as men commonly do, rather by the recollection of particular facts, than by the possession of those general conclusions, from a subserviency to which such facts derive their principal value.

“ Towards the close of life, indeed, his memory was much less vigorous than the other powers of his intellect; in none of which could I ever perceive any symptom of decline. His ardour for knowledge, too,

remained unextinguished to the last ; and, when cherished by the society of the young and inquisitive, seemed even to increase with his years. What is still more remarkable, he retained, in extreme old age, all the sympathetic tenderness, and all the moral sensibility of youth ; the liveliness of his emotions, wherever the happiness of others was concerned, forming an affecting contrast to his own unconquerable firmness under the severest trials.

' Nor was the sensibility which he retained, the selfish and sterile offspring of taste and indolence. It was alive and active, wherever he could command the means of relieving the distresses, or of adding to the comforts of others ; and was often felt in its effects, where he was unseen and unknown :—Among the various proofs of this, which have happened to fall under my own knowledge, I cannot help mentioning particularly (upon the most unquestionable authority) the secrecy with which he conveyed his occasional benefactions to his former parishioners at New Machar, long after his establishment at Glasgow. One donation, in particular, during the scarcity of 1782,—a donation which, notwithstanding all his precautions, was distinctly traced to his beneficence,—might perhaps have been thought disproportionate to his limited income, had not his own simple and moderate habits multiplied the resources of his humanity.' p. 181—187.

Notwithstanding the length of the preceding extract, we cannot take our leave of this very interesting publication, without laying before our readers the paragraph in which Mr Stewart announces his intention of declining, from this time forward, the duties of a biographer. The whole passage is marked with that grave and pathetic eloquence with which a man of superior genius is commonly found to speak of himself ; and one part of it reminds us forcibly of those fine prophetic sentences in which Milton, in his earlier writings, announces to the world his assurance of a more exalted destination.

' In concluding this Memoir, I trust I shall be pardoned, if, for once, I give way to a personal feeling, while I express the satisfaction with which I now close, finally, my attempts as a Biographer. Those which I have already made, were imposed on me by the irresistible calls of duty and attachment ; and, feeble as they are, when compared with the magnitude of subjects so splendid and so various, they have encroached deeply on that small portion of literary leisure which indispensable engagements allow me to command. I cannot, at the same time, be insensible to the gratification of having endeavoured to associate, in some degree, my name with three of the greatest which have adorned this age ; happy if, without deviating intentionally from truth, I may have succeeded, however imperfectly, in my wish, to gratify, at once, the curiosity of the public, and to soothe the recollections of surviving friends.—But I, too, have designs and enterprizes of my own ; and the execution of these (which, alas ! swell in magnitude, as the time for their accomplishment hastens to a period) claims, at length, an undivided attention.'

attention. Yet I should not look back on the past with regret, if I could indulge the hope, that the facts which it has been my province to record,—by displaying those fair rewards of extensive usefulness, and of permanent fame, which talents and industry, when worthily directed, cannot fail to secure,—may contribute, in one single instance, to foster the proud and virtuous independence of genius; or, amidst the gloom of poverty and solitude, to gild the distant prospect of the unfriended scholar, whose laurels are now slowly ripening in the unnoticed privacy of humble life.' p. 204-206.

ART. II. Voyage de Trois Mois en Angleterre, en Ecosse, et en Irlande, pendant l'été de l'an IX (1801). Par Marc Auguste Piëtèt, Professeur de Philosophie dans l'Academie de Genève, Associé de l'Institut National, Membre des Sociétés Royales de Londres, &c. &c. &c. 8vo. pp. 340. Geneva. 1802.

A book of travels is tried by a very severe test, when it is read in the country which it professes to describe. A foreigner can scarcely avoid committing some mistakes, which a native will detect; and, laying prejudices on both sides out of the question, will probably enlarge most upon those subjects that stand least in need of explanation to the people whom they concern.

M. Piëtèt, however, is not an ordinary traveller; and it would be doing him injustice to consider his book as intended to convey any general idea of the manners or appearance of the countries he has visited. M. Piëtèt is a philosopher, and had been in England before: the object of his present expedition therefore was, not to acquire exact or comprehensive knowledge of the British dominions, but to visit and converse with a few of our eminent men, and to inspect some of the most remarkable of our public institutions and natural curiosities. Instead of a general map of the country, therefore, his book presents us with detailed representations of a few insulated points. A complete account of the remarkable things in a country would be a very good account of the country itself; but the things to which M. Piëtèt has attended, are neither very numerous, nor, in our opinion, altogether judiciously selected. Though mineralogy was one of his leading objects, he neither visited Derbyshire nor Cornwall; and has hazarded various strictures upon the learning and system of education in England, without having thought it worth while to visit either of the Universities.

Though this work is written in the form of letters, it can scarcely lay claim to any of those indulgences that are due to a private correspondence. M. Piëtèt's letters are not addressed to his individual friends, but to the society of his fellow-labourers

in the Bibliothèque Britannique at Geneva, by whom they were originally inserted in that journal as fast as they were received. Considering them, therefore, as having been written with a view to publication, we cannot help saying, that they appear to us to be very slight and superficial performances; and that they contain a great deal too much about the author's own feelings and affections. Personalities of this kind are always but awkwardly associated, we think, with dissertations upon natural philosophy: and, at all events, we do not think very favourably of M. Picet's talents for inditing a 'Sentimental Journey.' His fits of tenderness and vivacity generally appear to us as far from the gracefulness of nature, as from the respectability of science.

But though this book does not always impress us with those sentiments which should be excited by the work of a philosopher, it is impossible to be out of humour with the author: he is the politest foreigner, indeed, that has lately spoken of our country, and is not only perfectly courteous, but absolutely loving to every person whom he has occasion to mention. There is a character of cheerfulness and good temper, too, impressed upon the whole work, that conciliates our esteem for the author; and whatever may be thought of his profundity, it is impossible to accuse him of being tedious.

The first letter contains a long eloge of Count Rumford, with a particular account of the Royal Institution of London, transcribed from the first report of the directors. The next, which is dated from Edinburgh, contains the rest of the author's observations in London, and is chiefly occupied with a description of the effects produced by the gazeous oxyd upon a select party of literati to whom it was administered by Mr Davy. It contains also the history of M. Picet's visit to the country seat of Sir Joseph Banks, where he seems to have attached himself, in a particular manner, to an old blind beaver, who nibbled green twigs with singular alacrity, and gave signs of great sensibility to the caresses he received. At York, where M. Picet passes a day, the experiment of the gazeous oxyd is repeated, and the power of the imagination over the nervous system is illustrated very successfully, by administering a quantity of common air to a young lady, instead of the gas; upon which she falls into an hysterical fit, exactly similar to what she had formerly experienced from respiration the gas itself.

M. Picet moves with such velocity, that he has never leisure to give an account of a place, till he has left it fifty miles behind him. His third letter, accordingly, dated from Glasgow, contains the description of his entry into Scotland, and of his proceedings at Edinburgh. M. Picet had scarcely crossed the Border,

der, when his attention was attracted to the disinterested and unsuspecting character of the Scots. An apothecary at Haddington cured his valet of the colic, by a judicious compound of ether and laudanum (both very costly medicines), and would receive no payment: and the master of a tavern in Edinburgh, lent M. Picet a great-coat in a rainy night, without insisting upon any security for its return. We could commemorate many other instances of the same nature, if we were not apprehensive of injuring M. Picet's credit among the prejudiced infidels of the South.

On his arrival at Edinburgh, M. Picet was inexpressibly afflicted to find that Professor D. Stewart had just left it; but was soon consoled, by meeting with Sir James Hall.

*‘——uno avulso (says he) non deficit alter
Aureus’——*

Sir James showed every sort of attention to the philosophical stranger; and made a laudable effort to convert the redacteur of the Bibliotheque Britannique to the faith of Dr Hutton. We find it difficult to believe, that M. Picet is a great geologist. He confounds the system of Dr Hutton with that of Lizaro Niño (p. 61.): he proposes to improve the former theory (p. 72.), by combining the operation of water with that of heat, although this combination is the very basis upon which it already stands: and, in p. 232, &c. he announces, as a discovery and original suggestion of his own, that very explanation of inclined and inclined strata, which has been so distinctly propounded in the elementary writings of the Huttonians. He is delighted with the term whin, or whinstone, which appears to be quite new to him; but is a little perplexed in the application of it to substances that seemed to possess its specific qualities in unequal proportions. Upon this occasion he fortunately bethinks himself of the new chemical nomenclature, and determines, upon the strength of that analogy, to denominate such substances, in future, according to their affinity to the true genuine whin, *whinneux*, *whiniques*, and *whinnatres*. ‘After this discovery,’ says he, ‘I found myself much more at my ease!’ M. Picet accompanied Sir James Hall to all the remarkable mineralogical stations on the coast near Edinburgh, and has described their appearances, on the whole, with great clearness and fidelity. Although it was vacation in the University, M. Picet hears enough of the system of education, to censure the Professors for not examining their pupils daily, as they do in the Academy of Geneva. In the present state of society, we must teach grown-up youths in the way in which they choose to be taught; and they do not choose to answer questions like children, in the hearing of a circle of strangers. The disposition

sition of our nation is averse from this kind of exhibition ; and the attendance of the pupils on the lectures is not enforced in our Universities by any regular discipline.

During his short stay in Edinburgh, M. Pictet saw some learned men ; but was most captivated with the celebrated Professor of Mathematics ; because, upon being shown a model of the environs of Geneva, the Professor, without ever having been there, was able to trace and point out all the remarkable parts with the utmost precision, merely from his recollection of the excellent descriptions of Saussure. This anecdote does great credit both to M. Saussure and to Professor Playfair ; but we do not exactly comprehend M. Pictet, when he introduces it under the name of a ‘ Psychological Experiment.’ In leaving those newly acquired friends, M. Pictet undergoes what he calls ‘ a moral electrification ;’ and laments that the pain of separation should always be exactly commensurate with the pleasure which the society had afforded. This lamentation is regularly introduced upon every future occasion of the same kind, and is repeated, we believe, ten times in the course of the work.

From Port-Patrick we have M. Pictet’s account of Glasgow, which, he says, ‘ is the Birmingham, and the Manchester, and the Oxford of Scotland.’ Here he is introduced to Dr Cleghorn, towards whom he immediately feels ‘ that moral affinity which acts upon souls, as the power of attraction does upon matter.’ The account of the city, which he announces with so much magnificence, is extremely scanty. The hospital is the only object upon which he enlarges ; but to make amends, there is annexed a very full description of a large iron-foundry in the neighbourhood. We are afraid our readers would receive but little entertainment from the description of the boring of cannon, the roaring of bellows, and the roasting of ores ; with all which, however, M. Pictet was so much delighted, that the night came ‘ upon him, he says, before his *ecstacy* was at an end.’

The interval from Glasgow to Port-Patrick is passed over without any observation. On his arrival there, he found that the packet had failed, and he was obliged to wait a day ; upon which misadventure he is pleased to remark, that ‘ if fortune imagines she can put him out of humour, she is greatly mistaken ; for he always makes it a point to find out, that what she meant to plague him with was the very thing that he wanted :’ So he walked out among the rocks, and among some sheep that were feeding without a shepherd, and seemed to be astonished (he says) at his appearance.

In this place M. Pictet is seized with a fit of sentimental folly, of which we should scarcely have supposed him capable. It begins with informing us, that a fine evening generally disposes him to

to sadness, and terminates in the following ebullition of vanity and egotism, which we subjoin, for the edification of our readers. It will be recollect'd, that the person who makes this heroic soliloquy, is shuddering on the brink of a calm sea, a narrow arm of which he proposes to ferry over in a fine July morning.

‘ What have I to do to commit myself two several times to the mercy of that perfidious element ? Am I so situated, as to be obliged to expose myself to danger ? or will the curiosity that draws me to those shores recompense me for the risks which I encounter ? Away, cold calculations ! What would have become of science, if her votaries had refused to venture every thing in her cause ? And what, after all, is my danger, compared with that which was encountered by Banks, by Cook, and by so many other bold navigators, who have shed a glory on our times, and added to the treasures of our knowledge ? Lo ! I follow in their track—at a great distance indeed—but still I follow—and I feel a spark of the divine fire with which they were inspired. Let me go immediately ! ’

He goes accordingly, and lands safely on the Hibernian shore ; where he observes that the people are worse clothed and lodged than in England, and picks up some ordinary bulls and anecdotes as he posts forward to the Giant’s Causeway. At Port-Rush he is introduced to the Reverend Dr Richardson, who lectures him in mineralogy, entertains him hospitably, and attends him to the remarkable object he had come so far to inspect. There is some good and clear description in this part. We give the following general account of the scenery in question.

‘ The Giant’s Causeway is a sort of promontory, or rather a jettee, which slopes very gradually down to the sea, and terminates in a point, against which the waves were dashing with great violence. This jettee forms the left point of a semicircular bay, surrounded on all sides by a steep and lofty coast, which displays, in all its extent, the finest specimens of basaltic phenomena—nothing is to be seen, on every hand, but groupes of columns in a vertical position. The guides have named those groupes after the common objects to which, under some points of view, they were supposed to bear a resemblance. One, for instance, near the bottom of the bay, is called the Organ, another the Weaver’s Loom, and so on.

‘ The Giant’s Causeway, properly so called, is itself one of these groupes ; and is so much lower than the rest, that the tops of the pillars are seen naked a little way above the level of the sea ; while in the other groupes nothing is visible but their elevation. The uniform appearance of the upper end of these innumerable columns makes it appear, at a little distance, like a pavement of polygonic stones. Upon a nearer approach, they are found not to be altogether on the same level ; and in walking along the Causeway, one is obliged to step continually up and down, as if on the steps of a stair.

‘ All the pillars of which this fabric is composed are nearly in perfect contact with each other, without the interposition of any other substance ; in which they differ from the basaltic pile at Dunbar, where the intervals are filled, as I have already mentioned, with a kind of coarse jasper. There is no great variety in their sizes ; the common diameter is from twelve to fifteen inches. The number of their angles is not uniform ; there were some with eight, and some with four ; but the most common form was hexagonal.’

After some more description, equally luminous and interesting, we are presented with a long mineralogical dissertation from the pen of Dr Richardson, from which we do not know very well what to conclude, except that he the Reverend Dr Richardson is not of opinion that basaltes are of volcanic origin. From the Giant’s Causeway M. Pictet’s next great stage is to the house of Mr Edgeworth. He does not fail to conceive a warm and intimate friendship for this gentleman in the first quarter of an hour ; and he describes his habitation with much perspicuity and animation. Mr Edgeworth, it seems, is a great mechanician ; and his house seems to be furnished like Merlin’s museum—nothing but spring-doors, and screw bed-posts, and flying panels on all hands—and maps and manuscripts, and authors and speculations ! M. Pictet thought himself in Paradise ! After this enchanting visit, M. Pictet comes back to the villa of his travelling companion, who had prepared a great dinner for him, and invited a peer and a general, and a priest, and Mr Malone, and a whole bevy of ladies. As the conversation, however, probably did not turn this day upon chemistry or philosophy, M. Pictet found it intolerably stupid ; and, after the party broke up, made the following address to his entertainers, which we really cannot praise for its politeness.

‘ And so this is the way you live with your neighbours in the country ! And you think it reasonable to throw away your time, your money, your physical and intellectual faculties, for the pleasure of being wearied to death, and for the profit of nobody but your wine-merchant and confectioner ! ’

His Irish friends, M. Pictet assures us, received this rebuke with great humility ; and only attempted to excuse themselves, by alleging, that the evil was irremediable, and that such was the style of living in the country.

On a subsequent visit to the family of the Edgeworths, M. Pictet had the felicity of being introduced to the writer of the Treatise on Education ; a work that, with all its redundancies and repetitions, is, in our opinion, incomparably superior to any modern production on the subject ; and passed a day entirely to his satisfaction. The conversation, however, we apprehend, would not have been very amusing to an unlearned auditor. It set out, it seems, with this alarming interrogation : ‘ To what degree do you

you conceive that a gazometer could determine the pressure sustained by an elastic fluid ?' In return for all the civilities he experienced from this distinguished family, M. Picet communicated to them 'several recipes for happiness,' the efficacy of which he had frequently proved on himself; and also presented them with the following method for measuring the quantity of happiness which they might be fortunate enough to procure.

'I then spoke to them,' says he, 'of that *serpentine* curve by which I have so often taken pleasure in representing my life. The *axis* of it is an horizontal line, which represents *sleep*; above this, is the region of happiness; below, that of sorrow. At the end of every day, by asking myself, whether I should have been better pleased to have passed it in sleep, or as I have done, I determine on which side of the axis the *co-ordinate* of that day is to be described; and I trace it larger or smaller, according to my recollection of the degree of pleasure or pain I have experienced.'

We do not conceive it possible to trifle more scientifically.

In Dublin, M. Picet visits Mr Kirwan, to whose geological speculations he listens with as much docility as he had done to those of his antagonists in Edinburgh. He gives a list of all the public institutions in that city, which seems to have been extracted from the last court kalendar; and alleges, that he saw in a bookfeller's window a pamphlet with the following characteristic title: 'General Instructions for all Seconds in Duels, by a late Captain in the Army.'

At Holy-Head, where he is detained a day, M. Picet amuses himself with geological speculations, which lead him to a conclusion precisely the same with that of the Huttonian theorists, except that he accounts for the elevation of the strata, rather by the action of included vapour or steam, than by the mere expansive force of an intense heat acting upon solid substances. All the difficulties that press against the Huttonian theory, apply with redoubled force to the very imperfect edition which is here offered of it by M. Picet. Of his journey to London we learn nothing, but that it was performed in forty-seven hours; and the next two letters are entirely occupied with the history of Count Rumford. The Count, indeed, appears to be the great hero of the piece; and every thing relating to him is delineated with a degree of minuteness not very suitable to a book of travels. Five or six pages are first filled with a particular description of his house and furniture in Brompton-row, and then a long narrative of his life and adventures * is detailed in two letters, which terminate

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* This account is so very particular, that M. Picet's readers are informed, that Count Rumford crossed from Dover to Boulogne in 1783, avec

minate with a full and complete list of all his successive publications.

The succeeding letter is a sort of guide to London, and contains the description of a great number of things, which are probably as interesting to strangers, as they are familiar to the natives. There is an account of Kensington gardens, and the Royal Menagerie, and the great porter brewhouses, and several objects of the same nature. The letter ends with a curious account of Lord Stanhope's discoveries in philosophy and the arts; the most remarkable of which, in our opinion, is 'a machine for *reasoning by*,' which M. Pictet seems seriously to consider as a contrivance of singular utility. He adds, indeed, that, notwithstanding the great pains which the Noble inventor took to explain it to him, he does not pretend perfectly to comprehend the principle upon which it is constructed!

The last letter contains an account of Wooburn Abbey, and the Bedford rams and bulls, together with a description of hawking, and an account of Sir John Seabright's pigeon-house. There are scarcely any remarks interspersed with this part of M. Pictet's narrative; and there are but few English readers, we believe, who would receive much information from an abstract of the hurried observations of a foreign dilettanti.

Upon the whole, though this book be not exactly what we should have expected from a Professor of philosophy, it is evidently the production of a man of reading and observation. The rapidity of the author's movements, accounts for many of the defects that might be pointed out in it; and its substantial merits will probably be more favourably, as well as more fairly, estimated by those who are indebted to the work alone for their knowledge of the objects it describes.

ART.

' avec ses chevaux qui firent grand peur au celebre Gibbon ;' and that the said ' celebre Gibbon ' appears to have found out his merits during the passage, as he has accurately described him to Lord Sheffield as ' the soldier, philosopher, statesman Thompson.' Now, as it is of the greatest consequence to vindicate the eloquent historian from the imputation of cowardice, as well as to preserve accuracy in narrations of so much importance, we have consulted the passage in the printed correspondence, and find, 1/., that the historian was by no means afraid of the Count's horses; and, 2 , that he was not lucky enough to find out the Count's good qualities, inasmuch as he evidently speaks of him in a style of irreverent ridicule. The passage merely bears, that among his companions was ' Mr Secretary Colonel Admiral Philosopher Thompson, attended by three horses, who are not the most agreeable fellow-passengers.' Vol. I. p. 608,

ART. III. *Lehrbuch der Mineralogie*. Von L. A. Emmerling. Zweite Auflage Geissen. Ersten Theils erster Band 1799. Zwarter Band 1802.

THE impulse which was given to mineralogy by the essay of Werner on the external characters of fossils, was propagated with rapidity over all those countries where the solid components of the globe had been previously investigated with any approximation to scientific accuracy. The difficulties of communication, which had hitherto been felt as insurmountable, appeared to be removed; and the new language which the science was taught to speak, seemed equally perspicuous and comprehensive. Succeeding improvements have shown that, though copious, it was not complete, and though perspicuous, not absolutely precise; but at the moment of its introduction, these defects, if perceived, were overlooked, and nothing opposed its general diffusion, but the prejudices of some, the petulant ignorance of others, and the indolent aversion to change which is common to all. Over these obstacles it easily triumphed; and the mineralogists of Germany eagerly demanded a work, in which the new mode of investigation and description might be applied in detail to every known species of minerals. These desiderata were comprehended in the lectures of Werner, pirated copies of which were obtained with a facility that set every scribbler to work. To change them by a few studied alterations, to mutilate them by intentional omissions, and to disfigure them by incongruous additions, was sufficient to constitute an original system of mineralogy. All writers on this subject, however, are not to be involved in this indiscriminating censure. The names of Estner and Reuss will probably be remembered as long as the science they have extended exists; and even Widenmann and Emmerling have some claims to gratitude and acknowledgement.

The mineralogy of Emmerling was originally published in three moderate-sized octavo volumes. It laid claim to public attention as a more than usually accurate statement of the Wernerian doctrines; and the convenience of its form, and comprehension of its contents, recommended it very generally. Either the public approbation had exhausted the first edition, or the author, grown emulous of celebrity, anticipated the demand, and employed himself in preparing a second edition, illustrated by all the alterations and improvements that his information of the progress of mineralogy could furnish. Of this improved work, the first part appeared in 1799. We know not with what degree of anxiety the purchasers expected the second part; but it is devoutly to be hoped that

that they were prepared to endure, with Christian resignation, the unexpected delay that ensued. An unlucky accident confined the author to his chamber, and with sickness came reflection. Every post informed him of the progress of mineralogy; every journal communicated some discovery; the tables of Karsten unhinged his systematic creed, and jumbled all he had written into chaos. New matter accumulated around him; his blunders called for correction, his omissions for redress; and every article in his new edition appealed against its author. Unable to combat these combined annoyances, in an evil hour he announced his determination to write a second part of the first part, correcting all the errors the said first part might contain. On the return of health, the determinations of sickness are generally forgotten; but to the book-making genius of a German, the compilation of the second part of a first part must have had irresistible attractions; and M. Emmerling, we have no doubt, beheld with infinite complacency its gradual expansion to more than the bulk of the original performance.

There have been authors who, conscious of the fallacy of the doctrines they had promulgated, have gallantly come forward and confessed their error. They have said, I have imposed a bad book on the world: let the purchasers return their copies, and I will present them with another book, in which I have endeavoured to correct my mistakes. Perhaps even the annals of Leipsic fair may record such instances. Has M. Emmerling acted thus? No. He comes forward, not gallantly, but unblushingly; and avows, rather than confesses his errors. I have written a book, he says, in which some things are right, and more wrong. Buy it—read it: then buy my second part, and learn from it how much of the first you must reject. You will find many chasms in the second part, because there are some articles allowed to remain in primitive imperfection, and because a recapitulation of what is correct in the first part, would have superseded the necessity of purchasing both.

Such are the views with which these volumes are composed; and those who have had resolution enough to go through them, are well entitled to say, that they are the views of a man who lets out his brains to a bookseller, goads his exhausted intellect to run over another sheet, and stumbles and halts along the course of literature.

There is some difficulty, our readers will perceive, in criticising a work of this description. Were we to proceed in the usual method, we might complain of errors and omissions in the first volume, and afterwards find them rectified in the second. We are obliged to follow the plan our author indicates; and, after

after draining a nauseous draught from the first volume, to search laboriously for its antidote in the Dædalian perplexity of the second.

We will not exhaust the patience of our readers, by toiling with them through the Prefaces and Introduction, or through the prolix observations on the basis of *oryctognostic* classification, and on the nomenclature of minerals, in which the principles we endeavoured in a former paper * to prove improper, are defended and illustrated by examples derived from the grossly imperfect German nomenclature. After wading through seventy-one pages of this preliminary matter, we arrive at the external characters of fossils, which are very unnecessarily dilated to a hundred pages more. Perhaps this prolixity may be deemed excusable, when the importance of these external characters is considered. We allow that the same number of pages and words might have been so employed on them, as to render the time spent in the perusal not unprofitable; and we must remember that these characters are the basis of the proud pre-eminence which the German nation has claimed in mineralogy. Let it, however, be remembered, that it is now near thirty years since Werner published his celebrated system; and that although it has been modified by various minute alterations, the grand basis remains untouched. When we consider the immense changes which this period has produced in the science, it may not be unprofitable to examine how far these characters possess the precision and simplicity which is essential to science, and peculiarly demanded by the progressive state of mineralogy. Though the investigation is suggested by Emmerling, it is not confined to him. It affects the whole empire of German mineralogy, which is founded on this basis, and indissolubly united to it.

External characters are said to possess a twofold advantage. They enable an adept, by a glance of the eye, and a touch of the finger, to determine the species of every mineral with certainty, and to convey, in a few words, such a description of that mineral, as may enable an observer in the most remote region to recognise it. To accomplish these desirable objects, it seems obvious, that in every description, an important difference should be made between those characters which are essential to species, and those which serve only to distinguish peculiar varieties. The description ought to be strictly limited to essential characters; and the varieties ought to be stated separately, as mere matter of illustration. Instead of this, however, we find, in the boasted system of Germany, the most perplexing and universal disorder. They can never abstract the general properties of a great class or order from those of the subordinate varieties. Essentials are mixed

* See vol. III. p. 50, &c.

mixed with the most trifling circumstances, and generic features confounded with the accidental peculiarities of individual specimens. All are announced with the same prolix solemnity. It is left to the sagacity of the reader to select what is important; and if he finds that the aggregate of characters presents an indefinite or an incongruous image, it is also left to him to discover the distinctive criteria.

In this way, we find colour elevated to the first rank among the external characters, and recorded with frivolous exactness. Forgetting that every mineral may possess every shade of colour, particular tints have been ignorantly appropriated; and when the same substance is found of an unregistered complexion, it is immediately set down as a separate species. Minerals have been most clumsily divided, according to their specific gravities, into light, middling heavy, heavy, and very heavy. By this felicitous division, the correctness of numbers is industriously avoided, and three fourths of known minerals are indiscriminately huddled into the class of middling heavy. By a similar and equally ingenious contrivance, the greater part of these are characterised as ‘fragile, not *very* cold, not *very* tenacious;’ and the greater part of the characters, except such as refer to the accidents of irregular form, which vary in every specimen, are equally indistinct and indefinite. Crystallisation is the only external character which an accurate observer finds unerring; but this must not be understood of general form, without regard to minute proportion. By measurement, it may be rendered supremely useful. But the German system despairs all mathematical aid; lumps all angles under the sweeping clauses of acute, obtuse, and right angles; and blotting, with clumsy finger, the intervening degrees, renders it impossible to describe crystals correctly; and then declares, that the form of crystallisation affords but little aid to the inquiry into the species of mineral substances.

In order to illustrate and justify these general observations, it may not be improper to take a description from the author before us, and examine how far *it* is intelligible and illustrative, and how far these boasted characters tend to render it accurate and communicable. That the instance may be fair, we select the article Quartz, a mineral very distinctly characterised, and of continual occurrence. Such of our readers as have bestowed any attention on mineralogy, will be able to judge of the description from their knowledge of the substance.

‘Quartz,’ says Mr Emmerling, ‘is found snow white, reddish white, yellowish white, greenish white, and milk white; passing through greyish white to yellowish grey, smoke grey, bluish grey, reddish grey, and pearl grey. It is olive green, honey yellow, yellowish brown, reddish brown, gelliflower brown,

' brown, and black brown. It is flesh red, blood red, brick red, carmine red, which passes into rose red, light violet blue, Prussian blue, and indigo blue.' In short, what colour of the rainbow is denied it ?

Its irregular forms, however, are, if possible, still more various ; for it is found ' massy, disseminated, in rounded fragments, in grains, in laminæ ; it is stalactitic, globular, reniform, tubulated, specular, pectinated, cellular, spongiform, hollow from impressions, perforated, carious, and amorphous.' We may now exclaim, Is there any form in which it is never found ?

Its crystals, however, are all derived from six-sided prisms, terminated by fragments of the same number of sides ; but as no angles are measured, or proportions stated, no precise idea can be formed of the modification ; and were they not distinguished by internal characters, they might be confounded with the carbonates of the barytes and lime, and with other crystals. The size of the crystals varies from ' very small to very large.'

The pseudomorphe crystals of quartz are various. It is found assuming the form of ' four-sided tables, lenses, rhomboids, cubes, octohedrons,' &c. &c. Nor are the Germans provided with any rules for distinguishing these from the true crystals, except the accidental roughness of their surfaces.

Its lustre varies in degree, and is sometimes the vitreous, and sometimes the fat lustre.

The fracture varies from ' the conchoidal with small cavities,' to ' the splintery with large splinters.' Sometimes it is ' imperfectly lamellar ;' sometimes ' fibrous, with coarse fibres.' No one can desire greater latitude than is here allowed him ; for, besides the great choice of general expressions, a most unscientific confusion is produced by confounding the *fracture* with the *structure* of the substance in question ; the laminae and fibres refer to structure, the conchoids and splinters to fracture.

' Its fragments are indeterminable, with sharp edges, and rarely rhomboidal.' This might have been of some use, if the fragments of most substances were not indeterminable. ' It is rarely granular :' that character, of course, can be of little use in inquiring after quartz, though the enumeration of its occasional occurrence may rescue some solitary specimens from exclusion. It might have been usefully announced among remarks, but its intrusion into the characters is impertinent.

It is commonly translucent, seldom semitransparent ; for (mark the subtlety of the distinction) a trifling increase of transparency elevates it to the more exalted rank of rock crystal.

' It is hard.' So are almost all minerals—so is Suffolk cheese. The question is, how hard—what stone will it scratch, and at will scratch it ?

‘ It

'It is fragile—It is middling heavy.' Almost all minerals are fragile, and nine tenths of stones are middling heavy. The absence of these most common attributes might convey a ray of illustration, but their presence can characterize nothing.

Such are the external characters of Quartz, in which it appears, on a complex view, to differ from itself, and in the detail, to resemble almost every other mineral substance.

He who can distinguish quartz by the enumeration of these nullities, must possess an intuitive mineralogical sagacity, surpassing in marvellousness all the legendary fables of necromantic skill. The famous divining rod is still, we believe, resorted to occasionally for discovering the direction of metallic veins; and if the students of Germany possess such acuteness as to comprehend and profit by the descriptions of minerals presented in their books, we should be induced to suppose that the acquisition of a divining rod was an indispensable requisite for unlocking the arcana of the science, and would impute our own indocility to the want of so useful an instrument. But the gross errors into which those who are most familiarized to the external characters are frequently betrayed, and the admitted impossibility of acquiring mineralogical knowledge from books, lead us to presume, that even the most zealous will abate their confidence in these characters, and seek for more unerring and unequivocal criteria in the structure of minerals, in their electric and magnetic relations, in their refractive and phosphorescent phenomena, in the effects of heat and the more simple chemical tests; that the relative hardness expressed, by specifying what minerals scratch, and what are scratched by a given species, will supersede the present vague description of hardness; that the exact specific gravity set down in arithmetical cyphers, will supply the place of 'middling heavy' and its coadjutors; and that future observers will employ themselves in these investigations, instead of balancing a stone in their hands, or feeling if it is cold.

In their censures of foreign mineralogists, the Germans seem actuated by a genius which, seeking to embrace the boldest outlines of their science, despises the littleness of detail, and the drudgery of accurate investigation. While they contemptuously sneer at him who measures the angles of a crystal, or seeks to discover the nature of a mineral, by observing the direction of its natural joints, they endeavour to systematize chaos, and, instead of recoiling from the endless admixtures, gradations and transitions of rocks, seem to expect that substances the most distinct should issue from elements the most confused, and class them with as much decision as if they were defined by regular form and unadulterated composition. Yet we often find them inconsistently .

inconsistently receding from this daring plan, and gratuitously bestowing on a shade of colour that power of constituting species, which they refuse to essential, integral difference, and decided variety of geological relation.

Thus quartz, if transparent, is rock crystal ; if only translucent, is quartz. Tinge it purple, and it is amethyst : Let it be reddish or whitish, and rather opaque, and it is milk quartz : Let its fracture be splintery, and it becomes hornstein : Let it be conchoidal, and it is flint : If mammellated or investing, it may be chalcedony : Let it be iridescent, and it is opal ; add a minute portion of iron and argil, and it is jasper : Let the iron be rather more than usually abundant, and it is eisen keisel. Yet all these, and more, are quartz : their grand constituent is silicious earth. Every test exerts on them a similar agency ; every analysis gives the same result.

Nor is quartz the only mineral unnecessarily subdivided. The zircon and hyacinth differ only in a shade of colour ; the chrysoberyl and oliven do not differ at all. The pyrop, which has lately exfoliated from the class of garnets, has no difference but superior beauty. The emerald and beryl differ only in colour ; tourmaline and schorl are precisely the same. Nor are these frivolous subdivisions confined to the combinations of earths with earths, where the uncertainty of analysis affords an excuse for confusion ; for they extend to the combinations of acids with earths and with metals. Werner divides the phosphate of lime into two distinct species, under the names of apatite and spargelstein. And in the recent tables of minerals, published by the enlightened Karsten, we find the combinations of lead and phosphoric acid divided into four species, solely on account of variations of colour, which the names affixed to them describe.

Though these observations are not strictly confined to Emmerling, they are strictly applicable to his performance ; for no system can be more vicious than the one he has adopted ; there is no imaginable perplexity on which he has not blundered—no lapse of inaccuracy into which he has not slid. Apparently unacquainted with either French or English, his attempts to display a knowledge of these languages, deform his list of synomyms with the most ludicrous blunders ; and, in his Second Part, he several times misunderstands Haüy, in a manner that bears the appearance of studied perversity. Fortunately for foreign authors, he seldom honours them with his attention, but, with very pardonable predilection, selects his authorities from among his German brethren. Some partiality is apparent in his appreciation of their merits. In the First Part, Werner rises lord of the ascendant ; but, in the Second Part, his declining glories are ex-

tinguished in the blaze of another luminary. Karsten, for reasons to us unknown, selected Emmerling's first edition as the text-book to his tables, and occupies a broad column, by repeating, after the name of each species, the words *Emmerling's Mineralogie*, with a reference to volume and page. The vanity of any man might be titillated by applause from Karsten; and Emmerling, in his Second Part, has elevated him as high as his feeble powers would permit. He now finds Karsten's arguments are unanswerable, his positions irrefragable, and his assumptions just. In cases of contest, Werner, and every one else, must give way; and much extraordinary incongruity is introduced into the work by this change of its tutelary genius.

The arrangement of a systematic work first attracts the reader's attention. Though the method followed in arranging the minerals in the first part of this book, be totally different from that adopted with reference to the same substances in the second part, there are some general censures to which in our opinion they are equally liable.

The first part approaches nearer to the method of Werner, than to any other system we are acquainted with; and the second part deviates only in a few unimportant transpositions from the arrangement of Karsten's tables. Both of these celebrated men assume the composition of minerals developed by analysis, as the basis of their system. They divide their minerals into orders, named after the earths, and generally class them according to the predominating component. Aware, probably, of the present imperfections of analytic chemistry, Werner does not rigidly regulate his classification by the resulting proportions of earths. He allows his judgment to be guided by imaginary families and gradations; and commonly places minerals in the class of the earths whose particular characteristics they seem to bear, without attending to predominance in quantity. Thus, we find Werner classes jaspers and opals among the argillaceous genus, though the opal contains no argillaceous earth at all, and the jasper only about 20 *per cent.*, filex being the grand component of both. Thus he also places in the silicious genus, the spinel, the sapphire, and other gems which contain no filex at all.

With greater reliance on analytic results, Karsten has regulated his system by them, as closely as the nature of the subject would permit. Yet even Karsten has been constrained to make many singular deviations from the strict rule of proportion. Clay, which it would be difficult to exclude from the argillaceous genus, generally contains twice as much filex as argil. Argillaceous shistus, wakke, and basalt, are all nearly similar in the disproportion of the earth under which they are classified. In the magnesian

genus

genus there are only two instances in which magnesia is contained in a larger proportion than any other earth; and it is well established, that some varieties of talc contain no magnesia at all.

We have, in a former paper, stated at length the arguments which appeared to us decisive against arranging all minerals by the results of analysis: those objections were confined to the combinations of earths with earths, where minerals of the most striking dissimilarity appear compounded of the same elements, and in nearly the same proportions; and where differences, the most important, result from causes that have hitherto eluded research. It appears to us, that no argument can more strikingly illustrate the positions we endeavoured to lay down, than the incongruities which deform the celebrated systems we have quoted. In the one, minerals without silex are jumbled with those in which silex is predominant, to the perplexity of the student, and astonishment of the proficient. The other commences with a steady observance of proportion, which is at once wantonly relinquished; and the deviation from regularity becomes more deceptive, because unexpected. Werner places the chrysoberyl at the head of the silicious genus; of course, it is concluded that silex predominates. Far from it; that mineral contains 71 per cent. of argil. Jasper is at the head of the Argillaceous genus, and it contains 75 per cent. of silex. Bol is placed at the head of the Magnesian genus, and it contains 19 per cent. of argil, 47 of silex, and only six of magnesia. Utter confusion seems preferable to arrangements, where the appearance of order is so extremely fallacious, where the species are not what the generic denomination declares them to be, and where those who industriously acquire a knowledge of the system are only rewarded by an accumulation of error.

In imitation of Werner, the diamond is allowed, by Emmerling, to constitute a separate genus among earths and stones. As there is no point in chemistry more clearly determined than the composition of the diamond, we viewed this arrangement with some surprise, till we perused the explanatory observations; in which we found, that so faint a rumour of the recent discoveries has yet reached Mr Emmerling, that he may be excused for harbouring an expectation that a more noble origin might yet be assigned to the diamond than the one Sir Isaac Newton prophetically allotted it. As Karsten has judiciously placed it among combustibles, we hope that, in Mr Emmerling's future volumes, he may correct the position of the diamond, and enlarge his account of it.

In the next article, Mr Emmerling's display of synomynes is, as usual, unfortunate. The English name of the zircon or jar-

gon is said to be *circone*. Even in the emendations of the second part, the zircon and hyacinth are allowed to remain separate species, though he had access to Haiiy's essay on their identity, through the medium of a translation of Moll's Jahrbuch. If these substances are not the same, we know not how mineralogical identity can be determined. They give the same results in repeated analyses; they possess exactly the same crystalline forms; they are of the same hardness, specific gravity, and double refraction, and only differ in colour.

After the zirconic follows the silicious genus, and the two volumes now become irreconcileably discrepant. As the second part is the result of the author's most matured experience, and contains several species not enumerated at all in the former, we must follow its arrangement in our observations, submitting, with all practicable patience, to the toil of referring to the antecedent portions of the corresponding articles in the first part.

The silicious genus commences in the second part with the almandine of Karsten. This mineral has been lately separated from the garnet, a species which was once made a common receptacle for all stones of a certain form; and, after the removal of these adventitious additions to its varieties, it seems fashionable to fritter down the original stock into numerous distinct species. The garnet once comprehended the leucite or white garnet, the melanite or black garnet, and the coccoithe or green garnet, with a long list of *et ceteras*. These minerals are now elevated to the rank of distinct species, and the garnet itself was subdivided by Werner into noble and common. Karsten constituted some varieties of the noble garnets into almandines; and, more recently, Werner has created for the Bohemian garnets the well-sounding appellation of pyrops. These alterations appear to us to rest on unimportant diversities, or on the results of analysis, which vary in almost every individual specimen of garnet, with an incongruity that appears irreconcileable with any classification. To illustrate this, we add a table of the analysis of varieties of garnets.

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	Components.
35.75	36.	40.	48.33	52.	43.	38.	36.45	34.	40.	Silex.
27.25	22.	28.50	30.	20.	16.	20.	—	6.4	28.5	Argil.
—	3.	2.50	11.66	7.7	20.	31.	30.83	33.	3.5	Lime.
—	—	10.	—	—	—	—	—	—	10.	Magnesia.
36.	41.	16.50	10.	17.	16.	10.	28.75	25.5	16.5	Oxyd of iron.
.25	—	.25	—	—	—	—	—	—	.25	Do. of manganese.
.75	—	1.25	—	3.3	5.	1.	3.97	1.1	1.25	Losa.
100.	102.	100.	99.99	100.	100.	100.	100.	100.	98.75	

No. 1. of this table is the analysis of a Syrian garnet, by Klaproth. Specific gravity, 4.085.

No. 2. A transparent red Bohemian garnet, by Vauquelin. Its specific gravity was 4.1554.

No. 3. A Bohemian garnet, by Klaproth. Specific gravity, 3.718.

No. 4. A noble Bohemian garnet, by Achard.

No. 5. A red garnet from the Pic d'Es Lids, by Vauquelin. It was crystallized in small dodecahedrons.

No. 6. A black garnet from the same place, crystallized in dodecahedrons, by Vauquelin.

No. 7. A yellow amorphous garnet from Corsica, by Vauquelin. Specific gravity, 3.5578.

No. 8. Common garnet, by Weigleb.

No. 9. Melanite, by Vauquelin.

No. 10. Melanite, by Klaproth.

The inspection of this table seems completely to verify Häüy's observation, that the analysis of garnets proves nothing, or too much. If we are guided by it, we should form ten species; for in no two instances is there a similitude of result. Yet all these agree pretty nearly in specific gravity, hardness, and fusibility. In crystallization they are exactly similar; and though there is considerable diversity in their geological relations, they are too imperfectly known to be much relied upon. It appears preferable, to allow these substances, which have so many kindred claims, to remain united till the repetition of analysis may have generalized our knowledge of their composition, and till we are better informed of the origin of the Oriental and Bohemian garnets. Though the list of localities is perhaps the part of Emmerling's book which is the most copious, and on which he has bestowed the greatest attention, he seems ignorant of the existence of garnets in the limestone of the Pyrenees, and among the substances ejected from Vesuvius.

The fifth species, the Vesuvian, as it is called, is merely introduced to say that Häüy calls it Idocrase. There are few names which would not be preferable to Vesuvian, an appellation which has been applied to Leucites, Augites, and almost every one of the numerous products of the celebrated mountain from whose name it is derived. If Emmerling was unwilling to extract any other benefit from Häüy's excellent observations on that mineral, he might have advantageously corrected the error he has fallen into in the synomyms of his first part, where he says that this substance is called in French, *chrysolithe des volcans*; and in English, *volcanic chrysolithe*. It was called volcanic hyacinth in English; and a similar denomination was bestowed on it in French.

The eighth species of the silicious genus is hornblende, which is subdivided into common hornblende, hornblende schistus, shining hornblende, or schiller spath, labrador hornblende, and basaltic hornblende. The synomyms contain the following words, said to be the English denominations of the three first of these substances : *Scort opaque*, *hornblendik schistus*, and *changeable spar*. Of the five subspecies enumerated above, three are absolutely the same, and needed no division ; and the other two are totally different, and ought not to have been associated with the rest at all. No difference whatever exists between basaltic hornblende, common hornblende, and shistose hornblende. We believe no German has ever attempted to subdivide *mica*, because it is sometimes found distinctly crystallized, sometimes in amorphous masses, and sometimes as a constituent of micaceous schistus. All these are allowed to be plain mica ; and we see no reason why the others should not be plain hornblende, for the cases are exactly similar. The great error consists in endeavouring to find an unsubstantial difference between the crystals of common hornblende, and those denominated basaltic hornblende, or basaltine, from the nature of the basis in which they are engaged. Why, on the same principle, is not the feldspar found in traps, separated from that in granite or other rocks ? This distinction should either not have been attempted, or carried rigorously through the whole system ; and if that had been accomplished, it would have created a chaos of unnecessary names and frivolous distinctions, that would have been a most pregnant source of errors and perplexities. The gradation from lamellar, or common hornblende, to the shistose formation, may be distinctly traced, and they are easily identifiable. Thus far we would endeavour to simplify, by condensing three species into one ; but instead of striving to conjugate the two remaining species with these, we would assiduously remove them. —

Mineralogists have long been informed by Saussure, that he had discovered a mineral in some of the compound rocks of Switzerland, Piedmont, Corsica, and elsewhere, which, though it bore some general resemblance to hornblende, differed from it in so many essentials, as to induce him to constitute it into a separate species, under the name of Smaragdite. The similarity of this name to the Greek word *smaragdus*, which, with a trifling elision, is still used in Germany for an emerald, induced Haüy to change it into Diallage ; but we believe the objectionable term is still used by such Germans as have been prevailed on by the arguments of Saussure, and the demonstration of Haüy, to give this mineral a separate place in their systems. An accurate examination of specimens leaves no room to doubt the triple identity of the smaragdite, or diallage, the schiller spath, and the labrador hornblende. Only

Only the two first have hitherto been analyzed, and their results present a nearer approximation than could be expected from minerals, which are very various in colour, and almost always closely united with other substances in compound rocks. In their structure, as far as it can be developed by mechanical division, all these agree, and all are irreconcileable with hornblende. M. Emmerling erroneously quotes Smaragdite as the denomination bestowed by Haüy on the substance which he calls Diallage.

This article has been already so much protracted, that we shall not contest the division of schorl and tourmaline into separate species. We know of no difference between them, except the superior transparency of the tourmaline; and we leave our readers to determine whether that should outweigh the coincidence of their crystallization, composition, and electric qualities. We are curious, however, to learn from what authority M. Emmerling derives the word *afbdrauer*, as the English name for a tourmaline. Could we suspect him of having examined any English book, we should imagine he had met with some Young Gentleman and Ladies' Introduction to his favourite science; but as we believe him little addicted to exploring the treasures of foreign literature, we presume some German friend has thought it witty to impose on his ignorance.

Though fully convinced of the identity of the emerald and beryl, we shall not endeavour to prove it, but leave German ingenuity to shew a difference between them. The existence of the new earth, which Mr Trommsdorf believes he has discovered in the minute beryls of Johangeorgenstadt, appears to us very equivocal, and we think it probable future analyses will identify it with the glucine.

In the next article we shall notice, Mr Emmerling obviously labours under very inextricable confusion. The class of strahlsteins, as originally constituted by Werner, was so comprehensive as to include the greater part of radiated substances. It was soon found necessary to divide it into the asbestosiform, the common, and the glassy. After these the tremolite was introduced, divided into three similar varieties. These arrangements were either unknown or disregarded by French mineralogists, and they created a variety of species, some of which they placed under the comprehensive denomination of Schorl, and bestowed on others specific denominations. In this state, Kirwan found matters, and he rendered confusion worse confounded, by associating tremolites, and various others minerals, with strahlsteins; then, wondering at the heterogeneous mass he had jumbled together, and endeavouring to reduce it to some form, consistence, and regularity, by the invention of six new species,

species, as auxiliaries to those he deemed so inadequate to perform the task of discrimination. Haüy, by a dispassionate inquiry, has simplified this chaos. He has retained the tremolite of the Germans, but changed the name to grammalite. He has divided strahlsteins, most of the asbestosiform variety of which he refers to hornblende, or, as he calls it, amphibole. Some of the common and glassy strahlsteins correspond to actinote, and others to epidote, which comprehends thallite and the acanticone of d'Andrada. Between these species he has shown essential differences, except between hornblende and actinote, which appear to vary so little, that future observations may probably identify them. Mr Emmerling has wisely steered clear of the self-created confusion of Mr Kirwan; but he has involved himself in one equally difficult, of arrangement, by strangely misunderstanding the very simple statement of Haüy.

As we have not room to discuss fully this intricate question, we shall only give concisely the distinctive differences of Haüy's species, and state what species, according to the German nomenclature, belongs to them individually. Epidote is distinguished from Hornblende and Actinote by an irreconcileable difference of crystallization. It yields, by mechanical division, a prism with angles of $114\frac{1}{2}^\circ$ and $65\frac{1}{2}^\circ$. Hornblende and actinote yield a prism of $124\frac{1}{2}^\circ$ and $55\frac{1}{2}^\circ$. Epidote melts into black scoria at the blow-pipe; hornblende into black glass, and actinote into white enamel. Hornblende has the same crystalline form as actinote, and yields a similar result to mechanical division. It is distinguished by its opacity and its fusibility, into black glass, instead of white enamel. Mr Emmerling is wrong in supposing, that thallite forms a species with Haüy. That name was given by Lametherie to epidote. The acanticone is an epidote. Such of the common strahlsteins as melt into black glass, are hornblende; and such as melt into white enamel are actinotes. This species is not called *actinote* by Haüy, nor *scoriæ striated* by the English. Where did Mr Emmerling pick up this word *scoriæ*, which he repeatedly intrudes on his readers as English? The glassy strahlsteins, which melt into white enamel, are actinotes: those which melt into brown scoria, and divide into prisms of $114\frac{1}{2}^\circ$ and $65\frac{1}{2}^\circ$ are epidotes, and include the thallites of Lametherie. The asbestosiform strahlsteins, defined by Emmerling to melt into a dark green or black glass, can only be the acicular hornblende of Haüy.

Passing over quartz, which we never heard called in English *quartz allman*, opal chalcedony, and their subordinate species, without enlarging on the reasons which convince us that they should be united, we are induced to pause at hornstein, with a hope, though a very faint one, of removing some of the obscurity

rity in which this mineral has always been enveloped. A great deal of ambiguity has arisen from its very objectionable name, which has been confounded with hornblende, and the pierre de corne, or roche cornéenne of the French. Independent of the extraordinary errors thus created, others equally fatal arose from two distinct substances being associated under this name; for the German hornstein comprehends two minerals—one composed entirely of filex, with a splintery fracture, always infusible, frequently contained in metallic veins, often investing minerals—and pseudomorphique, often forming veins, and disposed in irregular masses in secondary limestone. It also comprehends another substance with considerable variety of composition, always fusible in some degree, generally into a white enamel, but often so contaminated by foreign admixture, as to yield a dark-coloured glass never found in metallic veins, either investing or pseudomorphique, and never found in secondary limestone, frequently alternating with argillaceous shistus, frequently the basis of porphyry, and frequently forming veins in primitive rocks. We would agree with Dolomieu in calling the first of these Splintery Quartz, and the second Petrofex; but we are not yet prepared to assent to his opinion, that petrofex is the compact feldspar of Germany; nor can we agree with Häuy in associating pitchstone as one of its varieties.

Since it has been admitted by all mineralogists, that porcelain jasper is nothing but a clay which has been changed by the combustion of the coal on which it was incumbent, it appears very difficult to conceive the reasons by which it has been allowed to occupy a place as a distinct species. A burnt brick possesses equal claim, and would make a more respectable figure, as the catalogue of its uses might be swelled to extreme magnitude. It is needless to urge, that porcelain jasper, being a substance not prepared by human agency, is entitled to examination, though we are well aware of the nature of the operation which produced it. The extension of this principle would carry us too far. For the strata, alternating with the clay which forms porcelain jasper, are acted on by the same heat, and are all changed. The sandstones are semiflitrified; the iron ores are calcined, and sometimes imperfectly reduced; the marls are melted, and enlarged in bulk; and yet all these are allowed to remain in undisturbed obscurity.

We are unwilling to engage in the inextricable controversy about the origin of the family of Traps; and therefore, passing them over with the Klingstein bringing up their rear, we advance to Lava, which has been compressed into one species, though its varieties are innumerable and indefinite. Every new rock which serves as *pabulum* to the volcanic fire, by varying its aliment, changes its produce; and no two lavas are found possessing

ing similarity in aspect or composition. They are often found with bases the most diverse, and which apparently belong to substances admitting of classification, as petrofilex, pitchstone, feldspar, and volcanic glass, and not unfrequently composed almost wholly of leucites, packed together with scarcely any interposing basis. To attempt the forcible union of so extensive a class of substances in the narrow limits of one species, can only proceed from the most lamentable ignorance of volcanic products, or a bigotted adherence to preconceived opinions. Mr Emmerling's perseverance seems marked by a most determined attachment to error, as his more enlightened guide Karsten has given a luminous arrangement of volcanic substances at the conclusion of his valuable tables.

When it fares thus with Lava, what must Pumice expect? As a species, it is spared perhaps undeservedly; but an attack, we should never have dreamt of, has been made on its claims to a volcanic origin. This is led by Mr Esmark, a gentleman who has distinguished himself by various singular speculations. His frivolous arguments are announced by Mr Emmerling with some formality; and he descants oracularly on the mysterious origin of pumice.

It appears to us that Marecanite and Perlstein, which the English do not call *perlite*, are exactly the same, and that they, together with obsidian, have a common volcanic origin. The formation of pitchstone remains very dubious.

We fear we shall be longer detained by Feldspar, or *Feldspar*, as Mr Emmerling would have us call it; for this important species has been much subdivided. The beautiful transparent crystals found more abundantly on St Gothard than elsewhere, have been separated from feldspar, under the name of Adularia. The iridescent feldspar has been called after Labadore, where it was first observed; and the glassy feldspar found in lavas and porphyries, has also been ranked as a species. Besides these, another species is found under the denomination of compact feldspar, because it presents a splintery fracture, instead of a lamellar structure. A *compact spar* cannot be talked of, without involving a contradiction in terms. Kirwan, with more propriety, has called the substance in question Felsite, and not *compact fieldstone*. This is a mineral of considerable importance, as it forms the basis of some porphyries, and is frequently an ingredient in compound rocks; it is alleged, among others, in that containing diallage, near Turin. If this be the case, it is the Sade of Sansure, and the Petrofilex of the later French mineralogists. The other members of the feldspar family are completely identifiable; but we should feel some hesitation at this substance being admitted

admitted into the circle, till future observation and experiments have rendered its composition better known, have traced its geological relations more completely, and placed its connexion beyond the reach of cavil.

In the 25th article, we find Mr Emmerling insisting, that Häüy continues to use the word zeolyte, and dividing the minerals represented by it, for his own use, into earthy, fibrous, and crystallized. He might have known, that Häüy, finding substances essentially different associated under that term, exploded it entirely, and introduced a new name for each of the species he distinguished. Thus, the mezotype corresponds to the fibrous and acicular zeolytes; the stillbite to the lamellar and to some of the radiated zeolytes; the chabasie to the zeolytes called cubic, though in fact crystallized in rhombs approaching to cubes; and the analcinie to the *zeolythe dure* of Dolomieu; specimens of which, crystallized in icosihædrons, with pentagonal faces, have been found at the Calton Hill near this city. Part of this charge Emmerling seems aware of; yet he has only profited by it, to confound the chabasie with the analcinie, in spite of the simple mode of discrimination laid down by M. Häüy.

Passing by the Tafel Spath, which seems to be nothing but a siliciferous carbonate of lime, and other uninteresting species, we arrive at the tribe of Clays. Willing as we are to pay our tribute to the importance of these most valuable, though unassuming substances, and admiring the unusual independence of opinion with which Mr Emmerling has placed them in the silicious genus, in opposition to both his masters, we maintain an adherence to the opinion we have formerly expressed, of the inutility of attempting to limit them by the strict rules of oryctognostic inquiry. Considering that all clays are the results of decomposition; that their accumulation in particular spots is produced by alluvion; that they are subject, from their nature, to every species of contamination; that their composition is infinitely variable, and never, except accidentally, in any two instances the same—it cannot be a subject of surprise that we shrink from a task which appears as useless when accomplished, as vast in its extent, and difficult in its execution. Yet, even in this ocean, there are landmarks which may enable us to steer so as to subdivide them safely and satisfactorily for an economical or geological system, though they are unsusceptible of that accurate distribution into species which appears essential to a system of mineralogy. In those departments, the Germans have laudably done much. They first directed attention from glittering and useless gems to homely and valuable clays; and we must excuse their ardour, if, in the prosecution of these important inquiries,

Inquiries, they have endeavoured to force them beyond their legitimate limits.

There is no other article of the silicious genus which demands particular notice; and we are not disposed to extend our remarks to the other genera, which occupy the remaining part of this volume of 928 pages, besides 499 pages in the first volume, which carried the author only to the termination of the silicious genus. We think it unnecessary to inform our readers, that the same faults which so much deform what we have commented upon, continue to detract from the utility of the rest; that the remaining descriptions are vague, prolix, and deficient in essential application; that the synomymes are incorrect; that the observations are diffuse and unimportant, the arrangement radically defective, the subdivisions often founded on frivolous distinctions, and the misconceptions of other authors singularly abundant. The ostentatious copiousness of the list of authorities, might induce an unwarranted opinion of the accuracy of the author. Kirwan's Mineralogy, for instance, is perpetually cited, yet nowhere does he use the nomenclature of Kirwan, and nowhere do the pages he quotes contain the article referred to. If he ever consulted Kirwan, it must have been through the contemptible medium of a mutilated translation.

We need no concluding remarks to sum up the character of this work. Our opinion of it may be read in the observations to which it has given rise; nor do we see any reason to modify the censure they imply. In justice to Mr Emmerling, we may however observe, that many of the accusations against him are founded on errors not peculiarly his own, which he could not have avoided, without relinquishing entirely those systems to which all his countrymen have been accustomed to look for assistance; and it was not in the placidity of his nature to commence a rebellious innovation. He who understands a subject imperfectly, is contented to rely on authority; and feeling himself unable to stand alone, is afraid to examine his prop, lest he find it to be rotten. The peculiar faults of Mr Emmerling, are those of an imitator; and to the servility of an imitator, he adds the mutability of a feeble understanding. Hence arises the lamentable confusion he has introduced into his work, by changing from the system of Werner to that of Karsten, and the equal degree of credence he yields to all authorities not directly contradictory to the doctrine of the two great mineralogists who alternately tway his opinions. Seemingly appalled by the daring operations of the unsparing Häüy, he has not ventured to express approbation or dislike. Probably he did not understand the reasons of the revolution that was operating; and as his oracles had

had not spoken, Emmerling was dumb. On the whole, we have found his book irksome and unprofitable in the perusal. We have toiled through it with disgust, and closed it with joy.

If our readers are disposed to acquiesce in these observations, they will hear, without regret, our determination not to call their attention towards the promised volumes, should they at any future period be laid before the public; unless they possess a claim to examination, by their superiority to those we have considered. Yet, when we reflect on the maturity of Mr Emmerling's talents, and the surprizing perseverance with which he has pursued the path to that species of literary eminence which he seems peculiarly ambitious to attain, we think the probability of so great a change, as to bring him again before us, too distant to excite any serious apprehension. His nation have never been celebrated for facility in yielding to innovation, or for flexibility of intellect. They have resisted conquest and improvement with almost equal obstinacy, and have defended with similar pertinacity their religion and their errors. Nor can they soon be convinced of their mistakes, while German observers alone are trusted, and German writers alone are quoted, or while the same mineralogical creed continues to fetter the observations of almost every German observer. There must be some apostates from the established superstition, before the reformation can be begun: and such an apostate we expect to see in Karsten. He has already advanced to the relinquishment of several important errors, in which most of his countrymen persevere; and we have little doubt that his candour and penetration will lead him still farther. Much also may be expected from the recent journey of Werner to Paris, where he saw substances, of which he had but an indistinct knowledge before, and was introduced to men who would convince him that mineralogy was not the peculiar science of Germany. By such intercourse, prejudices must be annihilated, apparent contradictions removed, ambiguities made clear, and the most precious interests of Science incalculably advanced.

ART. IV. A Dissertation on the Mysteries of the Cabiri, or the Great Gods of Phenicia, Samothrace, Egypt, Troas, Greece, Italy, and Crete: Being an attempt to deduce the several Orgies of Isis, Ceres, Mithras, Bacchus, Rh:a, Adonis, and Hecate, from an union of the Rites in commemoration of the Deluge, with the Adoration of the Hoff of Heaven. By George Stanley Faber, A. M. Fellow of Lincoln College. 2 vol. 8vo. pp. 900. Oxford. 1803.

WE do not recollect ever to have perused a work which bore such decisive and numerous marks of having been manufactured according to the process invented by one of the

the Professors in the Académie at Lagoda,* as this Dissertation on the Cabiri. We would not except even its great prototype, Mr Bryant's Analysis of Ancient Mythology; because in that work there are certainly a few passages which could scarcely have been composed without the intervention of intellect. Mr Faber's work, however, is entirely mechanical. In the ancient mythology there is some ingenuity displayed in accommodating refractory facts, in tracing remote analogies, and in explaining distressing difficulties. Mr Faber, however, has attempted nothing of this kind. He has copied Mr Bryant servilely in every thing that is fanciful, weak, and absurd. He is the plagiarist of what no man of talent would have thought worth the trouble of copying. He has, in many instances, even heightened the absurdity which he has borrowed, while he has not been able to transfuse any portion of interesting ingenuity, or attractive novelty. Every page of the Dissertation betrays a singular frigidity of imagination, combined with a decided antipathy to common sense.

It would be difficult, we believe, for the most experienced linguist to determine, for some minutes after he has opened the book, in what language the greater part of it is written.

‘ It is a party-coloured-dress

Of patched and pye-balled languages.’

The ground, no doubt, is English; but it is so spotted with what the author is pleased to call Greek, Latin, Phenician, Sanscreek, Hebrew, and Iliensian names, that the component whole is entirely novel to the eye and the understanding.

Mr Faber is decidedly one of those

‘ who view

In Homer, more than Homer knew.’

He claims a more intimate knowledge of the isoteric doctrines of the Heathen mythology, than the most profoundly initiated mystagogue. Who or what were the Cabiri, seems to have been a matter of doubt and controversy in the days of Varro and Nigidius, when their rites were still in observance. At the distance of two thousand years, Mr Faber undertakes it; and informs us, ‘ The object of this Dissertation is to shew, that the mysteries of the Cabiri, which I conceive to be the very same as those of Ifis, Ceres, Mithras, Bacchus, Rhea, and Adonis, were principally founded upon certain mutilated traditions of the Deluge.’ (Preface.) Mr Faber, accordingly, traces Noah's ark through the darkness of three thousand years, and to the distance of some thousand miles, and finds it giving name to Ireland and the Hebrides, and forming part of the mysteries of Druidism.

Mr Faber thinks it probable that Bute and Arran received their respective names from having been the seats of the Helio-arkite superstition;

* Gulliver's Voyage to Laputa, c. v.

superstition; Budo, *the city of the arkite heifer*, Aran, *the ark*, (Vol. I. 63.) The Budha of Hindostan, the Buds-do of Japan, the Fohi of the Chinese, the Odin of Scandinavia, have all reference to Noah; and the Merlin of the Celts, with the Knights of the Round Table, are the Patriarch and the Cabiri (Vol. II. 437). Even in 'the Arabian Nights Entertainments,' the heated imagination of Mr Faber discovers the Sabian idolatry, and the consecrated oracular grotto, (452); and he hints, that the erection of one of the pyramids in Atovi, on the bank of a small lake, may have a reference to the deluge, (457). Ireland is Irch, *the moon*; Britain is Brit-Tan-Nuh-Aia, *the land of the fish-god Noah, who entered into the ark*; Albion is Alban-Aia, *the land of the moon*; Inch-Columb-Kill, *the island of the arkite dove*, (387). The cross-like form of buildings is a symbol of Noah and his ark; not of Christianity, as is vulgarly supposed. The English *te*, the Greek *tau*, the Hebrew *thau* and *teth*, and the Icelandic *tyr*, all refer to the bull, or Noah, or the ark; and in one of the forms of the Chaldaic *teth v* we may still perceive a faint resemblance to the hull of a ship, (391).

The extreme frivolity, indeed, and palpable contradictions, which teem in every page of this work, would have induced us to have passed it over in silence, had we not been apprehensive that the appearance of learning, which it exhibits, might gain some converts to the system which it supports; or that the credit of orthodox erudition might be impaired by the impunity of such elaborate absurdity.

After these remarks, which to many may appear contemptuous and severe, it is certainly our duty to bring forward instances of their solidity and truth. We hesitate, and know not how or where to begin; not that we are at a loss to find such instances: but, as we wish not to weary the patience and disgust the understanding of our readers, we must select only a few; and where every page presents an equal claim, selection is difficult. As, however, the radicals, which are alphabetically arranged at the beginning, may be considered as the key-stones which hold together the several parts of the system, we shall first examine whether they are adapted to the purpose. We refer our readers to 'Richardson's Dissertation on the Languages of the Eastern nations, for remarks on those radicals which Mr Faber has professedly borrowed from Mr Bryant.' * Of those which are of his own original invention, we shall bring to the test only such as our author deems most useful and unobjectionable.

'Arc, arg, org, erech, arech, *a long ship or ark*. Heb. arach siphina, *a long ship*.' Is Mr Faber ignorant that *arach* is here the adjective

* Richardson's Dissertation, p. 112—130. 253—267. 451—460.

adjective *long*; that *sipina*, as we shall presently shew, is improperly rendered, in our translation, *a ship**; and that these two words do not occur together in any part of the Old Testament?

‘Bu, bo, boi, bo, *an ox.*’ The Hebrew word is *boquar*, and properly signifies *an herd of oxen*. Mr Faber, in deriving these words from it, seems to have forgotten that *koph* and *resh* are radical letters, and, consequently, that to remove them, is precisely to remove the whole word.

‘Ma, mai, m’, *great.*’ The Hebrew word is *mod*. Mr Faber’s radicals, therefore, are essentially different: besides, *mod* is never prefixed; and *m*, when prefixed, never signifies *great*.

‘Menu, Manos, Menes, *Noah.*’ The name of Noah, with the prefix *m*, or the particle *ma*: thus, ‘*Ma-Nuh* will signify the *Great Noab.*’ The preceding observations will entirely destroy this very important radical; and also that which immediately follows—‘Menah, Men, Monah, Mon, *any thing Noetic, the ark, the moon.*’

‘Nuh, Nuch, Nuach, Nus, Nau, *Noah.*’ There is no authority for the existence of the word *Nus*, of which our author makes the most frequent and important use: † it does not occur in any of the Oriental languages; and, in fact, the addition of the *samech*,

* We are aware that the direct authority of the learned Bochart is here in favour of Mr Falser. ‘Gaulis puto Phœnices oposuisse *arca* *sipina*, *naves arca*, *vel arco*, ut Syri effrunt, id est, *naves longitudinis*, seu quod idem est, *naves longas*. Atque inde factum, litteris G & C permutatis ut passim, ut *navis Argo* appellaretur quæ prima fuit longa *navis apud Græcos.*’ (*Bochart. de Colon. Phœnic.* lib. II. c. 11. p. 739. Edit. Lug. Bat. 1682.)—Bochart’s authority for this supposition is Hefychius: but this author merely says, that among the Phœnicians, the *arcœ*, or *long ships*, was opposed to the *gaulæ*, or *round ships*. Even if we allow Hefychius to be correct, surely his authority is not sufficient to determine the *arkite* meaning of the word: and, granting that the ship *Argo* was thus denominated from its length, this very circumstance amounts to a proof, that, before it was formed, the word *arca* was never used to signify a ship. Although Buxtorf and Bochart seem to think that *sipina* means *a ship*, we are induced, from the derivation of the word and the context, to coincide with Taylor and Parkhurst, in translating it *the cabin*, or *a recess in the cabin*. It may perhaps be objected, that *long ships* existed among the Phœnicians before the time of Jafoni; but, if we may credit the Scholiast of Apollonius, the *Argo* was the first long ship (*Apoll. Schol. apud Bochart.*); and from every testimony, it appears that round ships, *gaulæ*, were in use a considerable time before long ships; consequently, the word *arca* cannot be considered as a diluvian radical.

† *Dissert.* Vol. I. 92. 124. 136. 239. 416. Vol. II. 147. 220, &c.

mech, a radical letter, makes it an entirely different word from any of the rest.

‘ Ph’, p’, pu’, *the*. Heb. pi.’ Pi, in Hebrew, has no such meaning.

‘ Hipha, siphina, hiph, siph, *a decked or covered ship*.’ The first word signifies a kind of alcove separated from the larger chambers in the Eastern houses by a veil : it occurs Psal. xix. 6. and Joel ii. 16. ; in both which places it is rendered by the LXX, πλευρα. Siphina is found but once, Jonah i. 5. where it is improperly rendered by our translators *ship*, which is expressed by a different word in this and the two immediately preceding verses : it seems to denote *the cabin, or a recess in the cabin*. The LXX render it κοιλη τη πλευρα.

‘ Tit, *the deluvian chaos*.’ ‘ In the system which forms the basis of the present work, it is supposed that the word *titan* is derived from Tit, *the colluvies of the deluge*; and, consequently, that it signifies a *diluvian*.’ (Preface.) Tit, in Hebrew, signifies simply *mud*, and is accordingly translated by the LXX, πηλος, βαθυπηλος : it has not the most remote reference to the *mud of the deluge*, and, consequently, none to a *diluvian*. With respect to the Titans, Mr Faber feels himself obliged to dissent from Mr Bryant : and, accordingly, having ventured to conjecture for himself, he has, as we before observed, plunged into absolute contradiction. In the heathen mythology, the Titans are described sometimes as the impious opponents of heaven, and sometimes as the great gods of the Gentiles : Mr Faber is therefore driven to the supposition that ‘ the appellation of Titan was a general name of all the persons who were living at the *era* of the deluge, both those who were saved in the ark, and those who perished beneath the waves.’ (Preface.) But it passes our comprehension to perceive how the term Titan could be applied to those who in no sense could be said to have sprung from the mud of the deluge, even if we allow Tit to mean, exclusively or generally, the colluvies which that event produced. Mr Faber, however, supports this hypothesis by a most convincing argument—‘ I do not see how the seeming contrariety can be accounted for on any other principles.’

But, enough of etymology. Let us now inquire, for what purpose Mr Faber has taken the trouble of disfiguring and misinterpreting so many words ? We shall perceive, that although the words are almost entirely of his own manufacturing, they are of little use : He is obliged, Procrustes-like, to cut off some letter from the beginning, middle, or end ; or, by the touch of his magical wand, to make the letters of the radical change place, or start above their fellows, before they will suit his purpose. Thus, Dactyli is derived from Dag-Tal ; *the solar god-fish*. Phrixus

is Ph' Erich Zeus, the arkite patriarch : '(vol. I. 303.) Hypermenestra is Hip-Or-Menes-Fora, the hippocauriform ark of the solar Mēnes : (vol. II. 44.) The word λαρνάς presents to the eye of common sense little or no resemblance to the Hebrew Aran, an ark : but no sooner is it touched by the great magician, than in λαρνάτε we behold the ark of Noah. (vol. I. 27.)

As the whole of our author's system rests upon the truth of the explanation which he has given, in his second chapter, of the Phenician history of Sanchoniatho ; it behoved him to have first established the authenticity and genuineness of that work : they are certainly very suspicious : but as the examination would lead us too far, we shall refer the reader to the principal authors by whom it has been undertaken. * Mr Faber differs from Bishop Cumberland with respect to Sydyk, whom the Phenician historian represents as the father of the Cabiri. The Bishop considers him as the Shem of Moses : Mr Faber endeavours to prove him to be Noah. But here a difficulty presents itself, that would at least have appalled an ordinary mind. Sanchoniatho declares that Sydyk was the son of Amynus, whom our author considers to be Ham ; so that Noah is both the father of Ham, and the son of Ham. Mr Faber indeed endeavours to solve this difficulty, (58.) ; but to us, what he advances appears ' confusion worse confounded.'

‘ —— Chaos urapire sits,
And by decision more embroils the fray.’

‘ Elium is evidently a mere variation of the Hebrew word Eloah : consequently, when connected with Hypsistus, it will signify, *God the Most High.*’ (67.) If these words, the one Hebrew and the other Greek, actually did occur, in syntax, in the writings of Sanchoniatho, they would add to the internal evidence, already very powerful, against their authenticity ? But Hypsistus is merely the Greek explanation of Eliun, which of itself signifies *the Most High.*—Such is our author's knowledge of the very language, out of which he has fabricated his radicals †.

Although Mr Faber constantly refers to the original Greek authors, yet charity will lead us to the comparatively favourable supposition,

* Cumberland on Sanchon.—Dodwell on Sanchon. Lond. 1691.—Jackson's Chronol. Vol. III. p. 2.—Wise on the First Inhabitants of Europe, p. 54.—Van Dale, Dissertatio super Aristea ; Accedit & Dissert. super Sanebon. Amstel. 1705.—Bibliotheque Choise, Tom. IX. 240. 242. 244.—Court de Gebelin, Allegories Orientales.—Meiners, Historia Doctrinæ de Vero Deo, p. 64, &c.

† We are surprised our author did not refer to the Punic scene in Plautus (Poenulus, Act V. scene 1.), where Hanno addresses the Carthaginian gods and goddesses, in these words, ‘ Eliun, & Eliuth.’

supposition, that in those instances where he has misrepresented their meaning, he has been led astray by Mr Bryant. Thus, he says, ‘ Herodotus mentions a deep and broad lake near Buto, in which, according to the Egyptians, there was a floating island.’ (IV. 61.) Herodotus is here referred to: but this account corresponds exactly with that given by Mr Bryant (II. 329.): whereas, they both conceal a very important circumstance mentioned by the historian. ‘ The island, which is called Chemnis, is situated in a deep and broad lake, near the temple in the city Boutis *. This island is said by the Egyptians to float: *I, however, saw it neither floating nor moving.*’ †—This imaginary floating island, our author asserts to have been a raft or ark, (62.) In proof of this assertion, he refers to the Ancient Mythology; but, on turning to the passage, we found no authority, but merely the *ipse dixit* of Mr Bryant.

The author of the Etymologicon Magnum informs us, that *Theba*, in the Syrian dialect, signifies a *heifer*: but *Theba*, in the Hebrew, signifies *an ark*; therefore the heifer was an emblem of the ark, (177). Our author here, however, has preferred his own logic, such as it is, to the *latitude of interpretation*, in which Mr Bryant has indulged, in order to prove the same point. Tzetzes (in Lycophron. verse 1206.) says, Θηβα γαρ η βους κατα Συριος. The cow is called *Theba* by the Syrians. Mr Bryant’s gloss is, ‘ *The ark, among the Syrians, is styled Bous, a Cow.*’ The words of the Etymol. Mag. are, Θηβα Συριοι λεγολας ηβους. The cow, in the Syrian, is called *Theba*. Mr Bryant translates the passage, ‘ *The sacred heifer of the Syrians, is no other than Theba, or the ark.*’ ‡ The ark of Noah, in the Syriac, is *kibouta*. §

We at first intended to have pointed out the passages in which our author has copied Mr Bryant, in order that we might measure out to each his due share of absurdity; but we are apprehensive that most of our readers would feel little interest in seeing justice done, and would rather believe in the merit of both, without farther evidence, than, by comparing passages similar to those which we have quoted, settle the respective claims of these champions of Noah’s ark.

We are, however, tempted to quote one short passage, as it exhibits a happy specimen of that peculiar talent, for which

* Mr Bryant asserts that there was a temple of Boutis, as well as a city, called by that name. In the Latin version of Herodotus there is; but not in the original. Χιμων—κείμενη πάρεστον βούτη—propter templum quod Buti est.

† Herod. Euterp. 171.

‡ Ancient Mythol. II. 422.

§ Richardson’s Dissert. 454.

we want an appropriate name, and to which Mr Faber seems to have been principally indebted for the beauties of his inititable performance.

' In fact, Minyas and Orchomenus are both equally Menu or Orca-Menu, the great arkite patriarch : while Hesione, who was the daughter of Danaus or Da-Nau, is Es-Jonah, the dove of the Noetic sun : Hermippa, Herm-Ippa, the ark of Hermes : Eteocles, Ait-Oc-El-Es, the solar god of the ocean : Mara, M'Arc, the great sun : Aleus, Al-Es, the deity of fire : Beotus, Bu-Theus, the tauric god : and Tritogenia, Tur-Ait-Og-Chena, the priestess of the belio-diluvian bull. This Tritogenia, as we have seen, was sometimes reckoned the wife, and sometimes the mother of Minyas. She was in reality nothing more than the ark, which was styled the priestess of the bull, as Noah was the priest of the beifer ; and which was indifferently esteemed the wife, the daughter, or the mother of the patriarch, according as he was immediately connected with it, constructed it, or proceeded out of its womb.' Vol. II. 185.

No ridicule could aggravate the absurdity of such a passage as this.

When we first perused this Dissertation, indeed, we thought no parallel to it could possibly exist. We have happened very lately, however, to meet with a curious work, entitled, ' *Herodote Historien du peuple Hebrew, sans le savoir*, ' (Liege, 1790), from which we shall extract some of the author's arguments for the identity of Proteus and Joseph, in order that we may humble Mr Faber, if he be proud, and console him, if he be ashamed, of his Dissertation, by proving that its merits are not altogether without example.

1. Proteus is derived from πρωτεύς, *first* : Joseph is styled in Scripture Shalit, *prince, chief*. 2. Proteus studied astronomy : Joseph beheld the sun, moon, and stars, in a dream, which worshipped him. 3. Proteus was a keeper of sea-calves : Joseph interpreted Pharaoh's dreams respecting the river kine. 4. Proteus did not give any oracular answers, till he was tied : Joseph interpreted dreams in prison. 5. Proteus had the power of walking at the bottom of the sea : The bones of Joseph were transported through the Red-Sea.

We may probably divide the few readers of Mr Faber's dissertation into two classes : the charitable, (these, we are afraid, will be the less numerous), who may suppose that our author has been attempting to imitate Swift in his etymologies, and who may be induced to exclaim, *Eh ! qui fait si ce beau système n'est pas, tout au long, un fort joli badinage ?* — and the just, who will advise our author, before he again obtrude his works on the public, to recollect the maxim of the poet,

' Scribendi recte sapere est et principium & fons.'

ART. V. *Travels from Moscow through Prussia, Germany, Switzerland, France, and England.* By Nicolai Karamsin. Second edition. Translated from the German. 3 vol. 8vo. pp. 845. Sidaey, London, 1803.

A BOOK of travels by a native of Moscow, excites the same sort of interest with any uncommon natural phenomenon—a horse in Venice, for instance—or a tree in Scotland. Such a work, too, claims somewhat more indulgence than we may always be disposed to extend to the productions of more fruitful soils. We are apt to be satisfied, if we here and there meet with a slight resemblance of those excellences which elsewhere abound in an unlimited number and degree. Nor should we be at all inclined to murmur at being forced to lower our standard of excellence, if the object, after all, could only be made to correspond with it. The effusions of Mr Nicolai Karamsin, however, must be allowed to require all this exertion of gentleness. They appear to us, we will confess, so very far below the writings of those travellers whom we have been accustomed to follow, and abound so copiously in all their faults, with such a universal want of their good qualities, that nothing but the rarity of a Russian work, and the amusing badness of the author's head, could have induced us to exempt this book from our quarterly catalogue.

Mr Karamsin, it is proper to premise, is of that gentle class of travellers who may be termed purely sentimental; who wander over a great tract of country in order to pour forth feelings which might be excited and indulged in equal variety within the four corners of any given chamber; and who, possessing the faculty of attaching peculiar emotions to the observation of the most ordinary occurrences, carefully treasure up the remembrance of such trifling objects as have happened, according to the capricious movements of their fancy, to connect themselves with the workings of their souls, while they studiously neglect the most important events, and shut their eyes to those grand spectacles which are interesting to all the rest of the world.

It is a first principle with these sentient beings, to refer every thing to themselves, and to consider their own concerns as the objects upon which all eyes are turned. The optics of most men, indeed, diminish the magnitude of external objects in proportion to their distance. But, in this tribe, the sphere of distinct vision is of infinitely small extent. They hardly perceive what is not almost touching them; and that, they see magnified in a wonderful manner. Such persons will pass through the seat of warfare and revolution, with a notice of their own accommodation and fare at inns—of the spots where their emotions overpowered them, and the congenial spirits with whom they enjoyed the luxurious feast of tears. If they ever think of any thing beyond their own

sighs and smiles, it is only to form the most ridiculous judgements of men and things, according to the standard of the first impression. They systematically doubt the inferences of reason; and only question the infallibility of feeling when it may be supported by rational argument. They admire Rousseau, and wander through his favourite haunts with some interest. But Lavater is much more suited to their sympathies; they will weep whole days in his company, and load themselves with relics of ‘the most interesting enthusiasts.’ It is but rarely that these wanderers are contented with writing. The world must be admitted to a share in their emotions; and volumes are thus made up of dull epistles, which could only have interested such friends as might wish to ascertain the fact of the writer’s welfare during his absence. An apology for inserting every trivial occurrence, is easily found in the example of those professed tales of fiction, which, abounding in uncommon incidents, are assimilated to the narratives of real life by an admixture of ordinary circumstances; and whole chapters are filled with trifles which happen to be true, because the same trifles, if wrought up in a romance, with a multitude of striking passages, would communicate to the whole an air of probability. As it is of the nature of this class of writers to be very communicative, M. Karamsin has fairly told us, in his Preface, that if it was interesting to Richardson’s readers to know that Grandison drank tea with Miss Biron, so it may be no less acceptable to M. Karamsin’s readers to be informed of similar events in his travels.

M. Karamsin left Moscow, his native city, and the seat of every thing that is dear to his heart, with the intention of performing, in the most comfortable vehicles, the easier and safer parts of the tour of Europe, in a year and a half. Accordingly, the first letter which he addresses to his friends, is occupied with describing the poignancy of his grief at the commencement of so dreadful an undertaking, and so long a separation. It contains a long address to *his own heart* upon this matter; and concludes with advising his friends to console themselves, if possible, during his absence. His wailing continues with scarcely any intermission till he arrives at Riga; but at some parts of his piteous journey, particularly at Narva, his perplexities thickened, and he seems to have reached the utmost depth of human woe.

‘God only knows the state of my mind at that moment; certainly all pleasing ideas of travelling were banished from it. O! had it then been possible, my friends, to have transported myself to you! I silently execrated those restless wishes of the human breast which hurry us away continually from one object to another, from true enjoyments to those which are illusive, as soon as the former cease to be new to us. Our imaginations

imaginations are attracted by deceitful appearances, and we are inclined to seek for pleasure in the uncertainty of future events.

‘ Every thing has its limits. When the huge wave dashes against the shore, it returns and precipitates itself into the deep abyss, though but just before it appeared to touch the skies.—Just in the moment when my heart was full of affliction,’ &c.

And truly all this is not without reason; for his travelling carriage had broken down, and he had actually got wet into the skin. Nor is it possible to imagine how far his distress might have proceeded, had not a young man of prepossessing countenance invited him to take shelter in a house, where an old man, whose goodness of heart was marked in his face, questioned him about his travels with ‘ manifest sincerity,’ while his wife gave him excellent bread and coffee. It is needless to add, that this adventure is followed by an animated apostrophe to hospitality and benevolence.

In travelling through Courland, M. Karamsin generally feeds heartily, and tells us upon what, and for how much. But at one inn, the evening was so fine, the rivulet so clear, and the foliage so shady, that he declined supping, and walked out alone. He beheld the setting sun. This brought to his recollection that he once saw it before at Moscow with great pleasure. ‘ Could I,’ he exclaims ‘ then imagine, that just a twelvemonth afterwards I should enjoy the beauty of the closing day near an inn in Courland? I took out my pocket-book, together with my pen and ink, and wrote what you have now read.’ About a month after his separation from his friends, he finds his heart more composed, and grows so plump, that he facetiously compares himself to the ‘ knight of the jolly figure.’

One of our knight’s common exploits is the visiting of famous authors; but this he always performs without any ceremony—he carries no introductions. ‘ Boldness,’ he observes, ‘ which takes towns, opens the doors of philosophers.’ His manœuvre on all these occasions is the same. He tells the unhappy sage whom he is determined to converse with, that he is travelling for the purpose of seeing the greatest living authors. Some are taken in; but others seem to have received his assaults rather coolly. Wieland, in particular, positively refused to harbour him, though he professed to have come to Weimar for the sole purpose of seeing the author of Oberon. However, by the most persevering importunity, he at last forced even this pass; and though the poet told him that the reason of his shyness was his fear lest an utter stranger might publish, according to the German fashion, the conversations which passed; and though our author removed his apprehensions, by saying he was not a German, and could

not write for the German public ; yet he does publish, in German, a full account of all the interviews which he had with Wieland, containing the very words used by him in talking upon a great variety of topics ; among others, upon the subject of his own peculiarities of feeling and habits. Such is the conduct of those who have their heads stuffed so full of sentiment as to leave no room for either prudence or propriety.

None of the authors upon whom M. Karamsin intruded, in his own easy manner, appears to have delighted him more than M. Weisse of Leipzig, the great writer of childrens books. ‘ He is a little man, about 60 years of age, whose excellence of heart beams in each feature. In his garden, he walks with a red night-gown and white hat ; but when he comes home, he puts on a bag-wig, retaining the night-gown.’ He treated our traveller with lemonade.

At Frankfort, M. Karamsin observed, that, ‘ during bad weather, it appeared destitute of inhabitants, for then every body staid at home excepting those obliged to go abroad ; but, in good weather, it seemed very populous, for then they are allured by the sunshine, like ants from their holes.’ Vol. I. p. 203. After several other remarks, equally judicious and profound, he is drawn aside from his general view of the town, by a very ‘ attractive solitary house,’ with a ‘ small garden,’ a most ‘ inviting old chestnut tree,’ and, still more irresistible, ‘ a race of children.’ So many charms, concentrated in one spot, prove almost too much for the sensibilities of this gentle Moscovite ; and we are agreeably surprised when he escapes with a description of the race, and a farewell address to the house and the tree.

From Germany our traveller hastens to Switzerland,—‘ the country of innocence and bliss—where the inhabitants serve none but God, lead a life that is only a pleasing dream, and therefore scarcely feel the pain of dying ;—where sprightly lads and lasses play on the banks of the impetuous Rhine, pull handfuls of flowers, and throw them at each other ;—the contented rustic whistles a merry tune, and gives the passengers a friendly nod.’ In such a paradise M. Karamsin is altogether overcome with his emotions : he cannot keep his seat, amidst so many exquisite objects of fine phrenzy. ‘ What a country ! What scenery ! ’ he cries, when two werfts beyond Basle—and ‘ jumps out of the carriage,’ throws himself on the ‘ blooming shores of the Rhine,’ and ‘ kisses the earth in a transport.’ In a note, he adds, what our readers may probably have some difficulty of believing, that he was then *only* twenty-four years old. He sometimes, however, asks leave to kiss the inhabitants as well as the ground, and meets with rather an uncourteous return from these children of nature. At a peasant’s

sant's marriage, he is overcome with the happiness of the parties, and resolves to leave them a token of remembrance. He gives the bride a small copper coin—she stares, by turns, at the bridegroom, the gift, and the donor; who rejoices at their new happiness, and quotes something from Haller's poems. His love and bounty towards the all-interesting Swiss was not unrepaid; for though the engaging rustics did frequently laugh at him, they were often kind. Thus, a young shepherd, in a valley, with a limpid streamlet, foliage, cottage, and the other ingredients of sentimental situation, complied with M. Karamsin's request to give him a drink of water—saying, with a smile, ‘Drink, my friend, a glass of our water.’ Nor was so wondrous an act of natural benevolence thrown away. ‘I was about,’ says our traveller, ‘to press the good-natured obliging man to my heart as my brother. Oh, my friends, why were we not born in those times when all men were shepherds and brethren?’ Nay, such is the effect of a cup of Swiss water, that M. Karamsin declares, he would willingly renounce his superior knowledge and illumination, to regain the original state of nature. It also enabled him to read very clearly in the shepherd's eyes, at his departure, a fervent wish for his happiness: (II. 5. 6. & 7). But the grand enjoyment of this country was Lavater; whose vanity M. Karamsin fed, while he ate his dinners, and was permitted to purchase his MSS.; that is, his printed, but unpublished works, which the physiognomist would upon no account give to the world in the common way, but sold to as many as would take them from him privately. He discovers Lavater not only to be the best of men, but a truly great man; because he never reads the works in which he is either praised or censured; and is very angry with our brethren of the *General German Review*, for not comprehending Lavater's definition of the purpose of existence, viz. ‘that the constant, most solid, and most suitable existence, is the purpose of existence.’ All this, our traveller thinks is not only correct, but perfectly familiar. This truly great man, we are told, is a ‘friend to ahs! and ohs!; and is captivated with two Danes, one of whom strikes his forehead, and stamps with his feet, while the other holds his hands, and fixes his eyes on heaven, whenever Lavater speaks with warmth, (II. 27).

After enjoying, in such delectable society, all the luxuries of laughing, kissing, weeping and sighing—with a thunder storm, a water party, and weddings and funerals in abundance, M. Karamsin set out for France. In his way towards the frontiers, he remarked some odd inscriptions on old houses. One of these contains a specimen of *non sequitur*, scarcely surpassed by any of our author's own reasonings. ‘Build thy hope on Ged; for this house is called the Black Sow.’ At Ferney, M. Karamsin

Karamsin meets with two young Englishmen on their travels. It would have been difficult for such a triple compound to have been formed, without some singular explosion—‘ They drank some excellent wine, with the most devout wishes for the eternal felicity of Voltaire ! ’ (II. 101).

At Lyons, M. Karamsin finds ample allowance of sentimental food. He sees Vestris dance, ‘ with his soul in his feet ; ’ is quizzed by two young Frenchmen, and, mistaking it for French politeness, is thrown into ‘ a kind of rapture ; ’—recollects that he is upon ground over which Yorick wandered in search of the tombs of *Amandus* and *Amanda*, and expresses no small astonishment, that the bustle of the Revolution should be so interesting as to make the Lyonnese ‘ care very little about the monuments of love and tenderness,’ (II. 206).

In a receptacle for madmen, M. Karamsin meets with a sufferer, who excites in him a very natural sort of sympathy.

‘ One of these unhappy beings was sitting on the gallery at a small table, and had paper, pen and ink. Immersed in profound thoughts, he leaned his elbow on the table.—“ That is a philosopher,” said our conductor, smiling, “ paper and ink are dearer to him than bread.” “ But what does he write ? ”—“ God knows ! probably nonsense ; but why should he be deprived of so harmless a pleasure ? ”—“ You are right, answered I, sighing.’ (II. 191.)

In Paris, our traveller fares, if possible, still better. Here his soul is in a constant flow. He makes a pilgrimage to Ermenonville, and finds, that after a man has seen the sun set on Rousseau’s grave, he may say, ‘ I have had one happy moment in my life,’ (III. 184). In the church of St Dennis, he feasts, among other things, on the portrait of the Maid of Orleans, who was, he tells us, the heroine of Voltaire’s *Pucelle*, (III. 164). In the *rue de la Ferronerie*, where Henry IV. was assassinated, he would not live for the whole world ; he is even enraged at his coachman for stopping on that ground, because it did not open to swallow up the detestable Ravillac, (III. 77.) The wretchedness of an old beggar woman in the *Bois de Boulogne* affords him an excellent treat, and upon very cheap terms ; for, after drawing from her a full account of her miseries, and making her submit to a variety of sympathetic exclamations, he only presses her hand, and departs, (III. 31-2 & 3). The following passage contains a curious anecdote, if indeed we can at all rely on M. Karamsin’s information.

‘ Here poverty often teaches people the most singular means of getting a livelihood : How many are there here who have not a single sou of certain income, and yet daily appear well-dressed at the Palais-Royal, in the theatres and public walks ; and who, were we to judge from their looks, live as free from care as the fowls of heaven ! —But how is this

this done? In many different ways—they have methods without number of gaining something, which are not known in any place but Paris.

Thus, for example: a well-dressed man, of a noble appearance, who, over his dish of *bavaroise*, talks fluently, tells all kinds of pleasant anecdotes, and jokes with great ease and freedom, may be seen every day in the *Caffé de Chartres*; and how does he live? By the sale of bills pasted up, which every night, when all others are asleep, he tears down from the corners of the streets, and carries to the pastry-cooks, who give him a few sous for his trouble. He then lays himself down quietly on his bundle of straw, in some *grenier*, and sleeps sounder than many a *Cicclus*.

‘Another who is seen every day at the Thuilleries, and the Palais-Royal, and who, by his dress, might be taken for an ecclesiastic, is a farmer; and what kind of a one do you think? He farms the hair pins which are lost in the Italian theatre. When the curtain drops, and the company are leaving the house, he makes his first appearance in it; and while the lights are extinguishing, he goes from box to box in order to search for the lost pins; not one of them escapes his Lyncean eye, let it lie where it may; and when the last candle is extinguished, our farmer picks up his last pin, and with the hope of not dying next morning of hunger, hastens to the broker to sell him his treasure.’ III. 112.

113.

It is fair, however, to warn our readers against implicit confidence in this traveller, whose ignorance and imagination are perpetually misleading him. Lavoisier, he says, has made all the Parisian ladies so fond of chemistry, that they analyse the sensibilities of the heart by chemical rules, (III. 69). At a meeting of the Royal Society of London, he saw, what, we believe, has seldom been observed by others, the President ‘passing his judgment upon various works, but with great candour and moderation,’ (III. 243). In Newgate he learnt that convicts often preferred being hanged in their native country, rather than being transported with bad company, (III. 232); and in a trading vessel, he heard a drunk steersman request the captain rather to throw him over-board than strike him, because that to an Englishman is worse than death, (III. 322).

In England, the last object of M Karamsin’s tour, he is apparently so much exhausted with his previous delights, that he can scarcely enjoy himself at all. Besides, ‘the English in general do not much care about salad and garden herbs; roast beef and beef steaks are their usual food, and hence their blood becomes thick, and themselves phlegmatic, melancholy, and not unfrequently self-murderers,’ (III. 200). Their hairdressers, too, are dull and clumsy. ‘Alas, I am no longer in Paris,’ he exclaims, ‘where the powder-puff of the ingenious lively Rulet played like a gentle zephyr round my head, and strewed it with a resplendent white aromatic tincture!’ (213.) Moreover, ‘the climate begins to affect

affect even M. Karamsin. He surprises himself philosophising; but this, he says, must be excused as ‘merely the effect of the air, for here lived Newton, Locke, and Hobbes,’ (215.) He meets, however, with some things to console him in his distresses, particularly a number of beautiful children, ‘all little *Emilius's* and *Sophias*;’—a blind beggar and his dog, which understood physiognomy—some ballad-singers, who gave him an opportunity of shedding tears: and then M. Karamsin is much more independent of external resources than most travellers; for he is happy if, after all the fatigues of the day, he can once more behold at night his ‘*dear portmanteau*,’ (III. 218.) He returns to Russia by the Baltic, and on his approach to its happy shores, is overwhelmed with unruly joy.

This book was originally written in German, and we have sometimes been disposed to think, that the translator does not greatly improve his author. ‘Thus, it is not usual, on the eastern side of St George’s Channel, to ‘*bail the setting sun*,’ (I. 52.) But some tropes of the same description cannot, we fear, be laid upon the translator. For example, the headach in his heart, of which M. Karamsin complains so piteously, (Vol. II. p. 116.) and the surprise which he expresses (*ibid.* 209.) at ‘*beggars and vagrants*’ having, since the Revolution, become unwilling to work. We think the concluding remark of this author extremely judicious. After saying that his letters contain a true mirror of his soul, his thoughts, and his waking dreams, he asks, ‘What is more interesting to a man than his own dear self? But perhaps others too will be amused with my sketches; perhaps—that, however, is their concern, and not mine.’

‘*Rien* (says Boileau) *n'est beau que le vrai, et le vrai seule est aimable.*’

ART. VI. *Scottish Scenery; or, Sketches in Verse, descriptive of Scenes chiefly in the Highlands of Scotland: Accompanied with Notes and Illustrations, and ornamented with Engravings, &c.* By James Crichton, D. D. Dalton, Dumfrieshire. 4to. pp. 420. Cadell & Davies, London. 1803.

THIS is a very pretty book to look at, and we dare say would be very much admired in a country where nobody understood the language in which it is written. It is full of plates, and very handsomely printed, and possesses exactly that form and dimensions that are most susceptible of the embellishments of a beautiful binding. In these particulars, the publication has unquestionably great merit. But we do not think it altogether so well calculated for reading; and are really afraid that most of those

those who take it up with such an intention, will very speedily lay it down again. It is necessary to observe, however, that we have read it faithfully through from beginning to end, and not without a certain species of entertainment. The work appears to us to be a sort of curiosity; and some account of it may probably be interesting to those who love to speculate on the inequalities of human genius.

So large a quantity of *pure prose* was never divided before, we believe, into cuttings of ten syllables, as Dr Critie has here presented to his readers; and no instance has yet occurred to us, where so much labour has been bestowed on a poetical subject, with so complete a failure of poetical effect. We make these observations, however, upon the supposition that Dr Critie intended to regulate himself by the ordinary standards of poetical excellence, and endeavoured to conform to the old and approved models that are commonly referred to in this department of literature. The uniformity and extent of his actual deviations, however, have compelled us to suspect that this is not the case; and that the reverend author, carried away by the innovating spirit of the age, has had the ambition of establishing a new school of poetry, and expected to set the example of an original manner of poetical description.

It cannot indeed be denied, that he appears to have borrowed a good number of hints from the inestimable treatise of the Bathos; but it must be admitted, that he has, in general, very much improved upon them, and that many of his devices for applying them are altogether and peculiarly his own. If we were to specify any one quality as peculiarly characteristic of this performance, we should pitch upon the admirable fidelity, and manly simplicity of the descriptions, which occupy so considerable a part of it. In describing a city, for instance, a vulgar poetical writer is apt either to present such general and picturesque images to the fancy of the reader, as suggest a lively picture of its external appearance, or else to make some allusion to the great and interesting events that may happen to be connected with it. Dr Critie, however, proceeds upon a much safer and more satisfactory plan, and contents himself with a fair enumeration of the parts which compose it. Of Glasgow, for example, he notices

the beauty and extent,
The Royal college, far and justly fam'd;
Its churches, bridges, river, and its green;
Its buildings, spacious streets, and rising squares;
Of ancient date, the venerable pile. ' &c.

Edin-

Edinburgh is represented, with equal accuracy and effect, with

— ‘ High-tow'ring Arthur's Seat
Upon the right, and fair Edina's hills,
Her castle, palace, and her deep sunk vale ;
Her bridges, buildings high, and spacious streets. ’

This plan of description, we must confess, is apt to give occasion to some apparent repetition; as the analysis of one city frequently affords pretty much the same results with that of another; but its advantages, in point of facility and precision, probably outweighed this inconvenience in the opinion of Dr Cririe.

In describing a landscape, the learned Doctor is scarcely less original. Painting to the eye, he knew, was extremely troublesome and uncertain; and no colouring of words, he was sensible, could ever convey an exact idea of the appearance and properties of every individual object. What, then, does he do? Words are the only instruments he can employ; and, guided by the maxims of the soundest philosophy, he considers that the words most closely connected with external objects, and most fitted to suggest them with precision, are their *proper names*. And, accordingly, he inserts the proper name and appellation of all the objects around him, instead of embarrassing his readers with a vague or imperfect description. In representing the prospect from Rosneath, for instance, he favours his readers with this ample catalogue.

— ‘ Loch-Long, Cumbray, and Clyde,
Are near at hand; Gourock and Greenock seen
Across the flood; Port-Glasgow, Renfrew old:
Glasgow afar, its smoke and gilded spires,
Scarce break the level horizontal line.
Nearer, Dumbarton's wondrous rock and hills,
Dumbuck, Dunfin, and, 'mid the tide, Ardmore.
Nor let me here at hand the lake forget,
Gair-Loch, with all its beauteous shores and woods,
The noble seat of Ardincaple fair,
Which vies with great Rosneath, already high,
And rising still in beauty and renown.’ p. 102. 103.

Here, besides the great accuracy and beauty of the description, the reader is charmed with a number of fine sounding names, that could never have been introduced by a dealer in poetical landscape. This is a beauty, indeed, that is scattered with great profusion through the whole poem, which contains many sonorous and significant appellations, that probably never stood in verse before. We have Killicrankie, and Dunniquech, and Tummel, and Tynedrum, and Freuchlin, Coryreckan, Au, Oich, and

—‘ Doch.

— ‘Doch-Ard, and Lochy deep,
Upon whose wooded banks stands Finlurig.’

Upon the same principle, he does not scruple to insert in his poem, all the vulgar or ridiculous appellations that may happen to be appropriated to the object in question. Thus, he calls the canal that unites the Frith and the Clyde, ‘the Great Canal;’ and celebrates the rugged mountains to the west of Inverary, by the name of ‘Argyle’s bowling green.’ Whisky is called ‘the water of life,’ &c. &c.

Where the objects have no individual or proper names, he is contented with that of the species to which they belong, carefully avoiding every approach toward picturesque expression. In giving an account of a grove, for example, he despairs to speak of the mixture of colours, or the alternation of light and shade; but he gives a very exact and clear enumeration of the sorts of trees which compose it. The sobriety of the whole passage, indeed, affords an admirable contrast to those gaudy and confusing descriptions with which the vulgar herd of readers are so much intoxicated.

‘Here spreads the level lawn, well stock’d with deer:
Here trees coeval with the castle, stand,
And wave their spreading branches high in air:
The lime, the elm, the oak, the larch, and pine,
The beech, and slender penile weeping-birch,
That vies with tallest aged forest trees.’ p. 60.

Although we have said that Dr Cririe scorned to borrow an interest for his descriptions from any allusion to great and interesting events, yet it cannot be supposed that a man of his learning should pass such events over without any notice. The art, however, with which he guards against their communicating any degree of improper animation or splendour to his work, is really surprising. He states the fact, in general, in the fewest and simplest words, and places it in such a detached position, that so far from raising up any unbecoming degree of emotion in the mind of the reader, it usually passes over it, like an extract from a chronological table. For instance :

- ‘I was here the Roman legions cross’d the Tay.’ —
- ‘Twas here his camp, well fortified, was pitch’d:
- ‘Twas there his conqu’ring bands a check receiv’d.’ —
- ‘In after-times, that castle old was built,’ &c.

The same love of truth, and contempt for the vain exaggerations of ordinary poets, has led Dr Cririe, in many passages, to adopt a diction that is new in the poetical department. Thus, he speaks of a river, that wafts ‘manufactures’ abroad; and, instead of the trite imagery of a torrent rolling down swains, and trees, and cattle, he tells us that

‘ In this place, its fury swept away
Buildings of late.’

If we pass from the consideration of the descriptions which form the largest part of the poem, and are all executed with equal judgement, we shall find traces of the same original genius in the subordinate parts of the work. The similes, for instance, are all of a very particular character. They appear, indeed, to have cost the author a great deal of trouble, and are scattered very sparingly through the work. The untimely death of a promising youth, to give but one example, has been frequently compared to the withering of a flower, or the cutting down of a tree. These, however, are obvious and homely images. Dr Cririe, with inimitable ingenuity, has contrived to give new dignity and pathos to the disaster, by comparing it to the loss of a diamond ring. The whole passage is well worth the attention of all lovers of originality.

‘ Yet here, again, the Muse has cause to mourn :
For Stone, emerging from the low obscure,
Had scarce attention gained, ere, snatch'd away,
He left the world its darkness to deplore.
The sparkling diamond thus, with dazzling light,
Emerging from the darkness of the mine,
When polish gives its lustre to the day,
With bright effulgence, blinds the Artist's eye,
Usable long its flashing light to bear.
Yet, thus, the shining treasure, source of joy,
When lost, affects the mind with grief sincere.’ p. 48. 49.

The singular turn of mind that suggested all those improvements upon the usual style of poetry, has not failed to manifest itself in the opinions and sentiments of the author. In commemorating the charms of Loch-Lomond, he seems to think of nothing but its size, and exclaims, with equal elegance and spirit,

‘ To thy stupendous size, what's Derwent Lake ?
What all the Lakes of Cumberland to thee ?’

It is with great reluctance that he afterwards acknowledges in a note, that ‘ a small island, such as Scotland (what is the island of Scotland ?) admits not of lakes, such as Aral, Baikal, and the Caspian, or of such as spread their vast waters in North America, and are the boast and wonder of a world.’

In another place, he tells us of a river whose ‘ madding fury’ is appeased by the beauty of his banks, and the songs of the birds that frequent them.’ The ill-concerted expedition to Darien is then termed ‘ the most glorious enterprise of ancient or of modern times. The Epigoniad is denominated an immortal poem ; and finally, the climate and fertility of the Highlands of Scotland

land are said to have degenerated and fallen off lamentably of late. In proof of which he asserts,

' The Capercailly, since, hath also fail'd ;
The deer their ancient haunts have mostly fled ;
And who can tell what tribes have been forgot ?
The seasons *too* have *also* chang'd, from mild
And gently warm to stormy cold,' &c.

But the highest flight of metaphorical sublimity which the author attains, is in describing the effects of the noise made in hunting an otter. The clamour of dogs and men, he says, was so great upon that occasion, that

' —— Silence, astounded, hears
Around the lake, such piercing shouts ascend,
And, trembling, dreads some bold usurper's grasp
To wrest the sceptre from his aged hands.'

The images here, it will be observed, have all that indistinctness and incongruity that constitute true grandeur and animation.

The learned author's partiality to prose does not influence his diction only, but may be traced in many of the peculiarities of his versification. Blank verse, it has been said, is verse only to the eye ; and of Dr Cririe's blank verse, this is correctly true. By far the greater part of it, if printed like prose, would certainly have passed unsuspected by the most tuneful readers of the nation. In writing it out into lines, too, the Doctor has by no means adhered servilely to the rule of making them all of an equal length. Some have two or three syllables above the standard ; as,

' Mid the howling of the wildernesses dark gloom' —
' Anon the water too is seen—tis great Loch-Long.'

Others have too few,

' Seen in thy roads Inch-Keith's green isle
And fortress old' —
' Hayfield, Macdugald's beauteous seat' —
' The woods and wide spread flood below,' &c. &c.

At the same time, that he may forfeit none of the privileges of poetry by disuse, Dr Cririe has made a very free use of those bold inversions, from the harshness of which other poets have generally shrunk back. Thus he says that, in ancient times, the shining ploughshare,

' ————— than the sword,
Not left became the generous warrior brave.'

And afterwards,

' Nor great Lemanus, flood tho' copious, boasts,' &c.

We have forgotten all this time to explain to our readers the plan and object of this extraordinary publication. It is a correct journal of a tour in Scotland; every stage being the subject of a separate chapter ; and all the incidents of the state of the weather,

ther, and the fatigue or satisfaction of the traveller, are inserted, along with a faithful enumeration of all the objects and reflections that presented themselves as he went along. To this are annexed, nearly 200 pages of Notes and Illustrations, consisting principally of extracts from the Statistical Account of Scotland, and references to school-books, in evidence of the author's erudition. If the price of the volume were a little more moderate, or its size better adapted for the pocket of a postchaise, it might not be without its utility as a travelling companion. It certainly contains more names of places, than any book of the roads we have ever met with ; and the engravings, which are about as correct as travellers are in the practice of publishing, might assist ladies and gentlemen in their descriptions of such places as they passed in their sleep, or were too much hurried to go to.

ART. VII. *Voyage en Islande, fait par ordre de sa Majesté Danoise.*
Traduit du Danois. 1802.

THE King of Denmark having heard, by accident, that there was a large island in his dominions, called Iceland, directed the Academy of Sciences to select some missionaries of science for the purpose of exploring it. The Academy, in obedience to his commands, appointed Messrs Olafsen and Povelsen to that frigid and curious office : the first, an Icelander by birth ; the latter (strange to tell) living there, though born in another country. The result of their labours is this very tedious and authentic book.

The Danish Academy (because perhaps they considered that nothing amusing could be dignified), have divided this work into four parts, corresponding with the four divisions of the island, into North, East, South and West. A prodigious number of topics are treated of in the first division, and the same order of subjects is pursued, with a sort of ponderous decorum, through the three others ; so that we have four dissertations upon the Icelandic method of feeding cows : And having ascertained, with the utmost precision, the quantity of salt infused into the butter in the Northern hemisphere of this ancient kingdom, an agreeable, though gentle, surprise is excited by the discovery, that the salt butter of the South consists exactly of the same proportions ; a sensation which swells out into full and entire satisfaction, when we come to know that the same wonderful ratio pervades the dairies under the remaining points of the compass ; that butter is muriated upon one great leading principle through the whole of Iceland ; and the question of flavour and conservation determined,

mined, not by local caprice, but by pure and steady reason. Upon the mode, however, in which this work is executed, we shall have more to say towards the close of the review.

Iceland is best known from its natural curiosities, and from the asylum which it afforded to learning in the early ages. There is something very singular in the fact, that letters should have flourished most vigorously in the most remote, and most inaccessible part of the world; and that men should have found any means of cultivating the luxuries of knowledge, where the sterility of nature seems almost to have denied them the necessaries of life—*Ingenium male habitat.* Upon this cold and frozen rock, poets sung, historians recorded, and legislators decreed, for future times. Man never gained such a victory over circumstances, nor rose so superior to physical evils. The Icelanders, after having extracted support from their unwilling country, adorned it with works of genius which were luminous in the darkness of Europe, and which retain some share of lustre at the expiration of eight centuries, when Europe is dark no more.

There must be much bodily idleness in any country, before there can be much literature; a remission of manual labour, before there can be much intenseness of mental exertion. If a few good books are handed down to us from any period, it amounts to a proof, that the same period must have given birth to many bad ones which we have never seen; because there is no such capricious prominence of genius, as, that one or two men should reflect, and compare, and compose, while every thing about them is brutal and ignorant: The fact is, that many try, and perish; and a few, who do better than the rest, are handed down to posterity. Upon these principles, it is difficult to conceive, how such a country as Iceland could have found leisure for literature. We should have imagined that her poets and historians must have been driven by hunger, where the Roman heroes often went by choice, to the plough; or that every spark of genius and talent which she possessed, must have been employed in catching fish. Yet Sir Joseph Banks, upon his return from that country, presented the British Museum with more than three hundred Icelandic manuscripts; and if a mere stranger could carry away so many reams of genius, in what numbers must they be found in the libraries of Copenhagen, and among the collectors of the country?

These travellers open their account of Iceland, by observing that the ordinary winter cold of Iceland is not very considerable, from 20 to 24 of Fahrenheit. When the heavens are very serene, the thermometer falls to 12, and has been sometimes as low as 40 below the freezing point. The period of the greatest

cold is from January to March inclusive. In April and in May, the winds set in from the east; and sometimes with such severity and obstinacy, that the cattle exposed to them perish in great numbers, and the vegetation of the ensuing summer is materially checked. The heat of the summer in Iceland is as variable as the cold of winter is continuous; it will sometimes freeze in the intervening night of two days, in both of which the thermometer has stood at 70. Exposed to the sun, the range of the thermometer, during the summer season, is commonly from 80 to 90 degrees; and the heat sometimes so intense, that every body retires in the day-time, and agricultural labours are pursued throughout the night. The range of the barometer is about two inches.

The principal minerals which Iceland produces are, the sulphate of iron, and the two principal ingredients of which that salt is composed. The Icelanders have no coal, but inexhaustible bogs of peat. The principal circumstances which render the herbage and the hay of Iceland so bad, are—the prevalence of the *equisetum*, which the beasts eat with great avidity and detriment—the want of enclosures, which are now entirely neglected—a deficiency of manure, and the very imperfect manner in which their hay is made. In the western parts of Iceland, they follow the English method of hay-making with some better success. The travellers remarked a considerable improvement in the soil, in their approach to some of the mountains; it was more tenacious, and the plants more succulent. This amelioration they attributed to the previous influence of volcanic fires.

The Icelanders are seldom remarkable for that ruddy complexion, so common and so pleasing in the rest of Europe. Those who inhabit the interior, occasionally acquire it; but all the inhabitants of the sea-coast display on their countenances the severity of the elements to which they are exposed, and the hardships which they endure. There certainly can be no superfluity of vigour, or redundancy of health, in those who are out whole days upon the sea, unsheltered from wind and rain, and sitting, to the depth of one half of their bodies, in sea-water. The diseases to which they are principally exposed, are, *pneumonia* and *hypochondriasis*. * The women suffer much from *amenorrhœa*.

The Iceland houses, in a village or town, are built in a line, and covered with green turf. † The *fagade* is either whitewashed,

* It is a very surprising fact, that syphilis never made its appearance in Iceland till 1753, not long before it reached Otaheite. Vol. V. 221.

† Glass is very dear in Iceland; the windows are made with the hornion and amyon of a cow.

washed, or smeared with a certain red earth; and a neat *trottoir* of flat stones runs before the doors. The manner of building is better adapted to the nature of the country than any other: It protects the inhabitants from cold more effectually than walls of masonry, and remains firm during earthquakes, which would overthrow houses of a more lofty structure. They are but too frequently put to the test; and the examples are very numerous, of large Iceland villages which have escaped with perfect impunity from a very severe shock of an earthquake.

An Iceland peasant generally breakfasts and sups upon curds, from which the whey is pressed out, and which are diluted with sour or fresh milk: At dinner, he eats dry fish, both summer and winter, with the same preparation of milk as at his two other meals. His usage of bread is very sparing, as there is not a single blade of corn cultivated upon the whole island; and meal is, to the Icelander, an high-priced and exotic delicacy. In every country, there are certain dishes, which are as much articles of faith, as articles of luxury, and which the native eats as well for the safety of his immortal, as for the gratification of his mortal half. An Icelander would consider himself irretrievably lost, if he did not eat hung beef at Christmas and Easter. The vulgar prepare and consume it, with trembling precision, after the manner of their fathers; and the boldest sceptic, who indulges himself by laughing at the principle, thinks it as well to comply with the practice.

Those who will not read, must be contented with ignorance; nor can men of reflection in this country expect to understand the true nature of sour butter, if they will not read a dissertation upon that subject, by M. Pingel, Counsellor of State, written in the Danish Mercury for the year 1754; * and the masterly observations of Horrebow upon the same subject. † It appears clearly, from the labours of these wonderful men, that the large magazines of butter mentioned in the Chronicles of Iceland were not of salt, but of sour butter. Salt butter cannot be safely kept above a year. Common butter, well pressed from its whey, becomes sour at the expiration of six months, of a white colour, and so incorruptible, that it may be preserved for years. The Icelanders universally prefer it to salt butter; and, in Catholic times, the monasteries had large chests of it, forty feet long by seven feet high.

Tolerable beer is brewed in Iceland, but drank only on occasions of great festivity; their common drink is whey in its ordinary state, and another preparation of whey, which, after hav-

ing been long kept, undergoes the vinous fermentation. Cows milk, whey pure or diluted with water, and, in times of scarcity, even fish, both constitute the nourishment of children. An Iceland woman rarely suckles her child above three or four days: A most extraordinary fact, which is stated without the least explanation; though it probably arises from the necessity the women are under of labouring hard for their support, and their inability to endure such a drain upon their strength, especially with the very meagre sustenance which they are in the habit of taking. The men occupy themselves, part of the winter, in making woollen stockings and caps, though many of them continue their fishing throughout the whole of the year. All the peasants who hold from the Crown are compelled, at a certain season of the year, to work on board the packet-boats, or find a substitute. The first labour, as soon as the ice is melted, is to dig turf for the ensuing winter. At this season of the year, the women take care of the cattle; a task which devolves upon the other sex in winter. The hay harvest begins in the middle of July.

All laws originally, and in the infant age of societies, teach economics, as well as virtue and vice. There is a period of gross ignorance, in which it is important to show men how to gratify their wants, as well as to restrain their passions. Some few may be acquainted with a rule better than that which the law prescribes, but the many know none so good. In after times, when experience is gained, and knowledge easily communicated, many points are left to discretion which were before matters of positive institution; but almost all early codes are as imperious about reaping, sowing, and thrashing, as they are about murder and theft. To this day, the Icelanders pay the most implicit submission to the economics pointed out by their old laws; and churn, and carve, and fatten, and manure, according to the letter of a statute. Wages are of course fixed by the same authority; an institution upon which Olafsen and Povelsen expatiate with peculiar complacency, and which they commend with plenary approbation: But as Messrs Olafsen and Povelsen were sent over to see and hear, without having any orders to reason, we shall pass over this voluntary and extra-official philosophy without severity or comment.

The Icelanders have all that general acuteness and dexterity which results from the complication of labour in one person. The same peasant is frequently forced to carry on the trades of watchmaker, locksmith, carpenter, brazier, &c. &c.; and though each trade is but imperfectly executed, the fertility of resources derived from these multiplied occupations frequently produces the most

most ingenious contrivances, and nourishes a strong genius for mechanics.

The Icelanders are great wrestlers and players at chess ; but their principal amusement consists in reading the ancient poets and historians of their countries. While the rest of the family are spinning and carding round him, in the long winter evenings, a person selected for that purpose reads aloud to the whole group ; and a long habit of this sort has given to the Iceland peasants a considerable degree of curiosity respecting the history of their ancestors. It cannot be supposed that these histories, so much relished by the vulgar, are very beautiful in composition, or profound in remark : they are probably not many degrees elevated above the lepid fables of Mrs Goose ; but they create cheap and harmless occupation, and promote civilization, by making the powers of the mind an object of veneration to men whose situation might incline them to respect only those of the body.

Iceland exhibits the same traces of large ancient forests as many other countries do which are now entirely destitute of trees. Trees of a great size are continually dug up in the bogs, though it is now almost impossible to rear any timber at all in the island. The fact is, that the spontaneous forests of cold countries generally begin in some warm sequestered spot : under the cover of the earliest trees that have sprung up in these favourable circumstances others are reared ; and the skirts of this first mass afford shelter and (by the fall of the leaf) manure to young sucklings. Without attending to this process, future cultivators begin with an exposed situation, and wonder they cannot rear forests where forests grew before. The ancient existence of large forests in Iceland does not however depend upon conjectures ; their numbers and boundaries are described with the utmost accuracy in the ancient histories of the country. *

Prodigious quantities of floating wood are cast ashore upon the coast of Iceland ; particularly, towards the north, there are at least ten or twelve different species of timber brought by these drifts. The general idea is that they come from America.

Nature has crowded together a great number of sublimities in this island. Heat and cold have united their effects to enhance the grandeur of the spectacle ; and hailstones and coals of fire run along the ground. The traveller who quits this peaceful country to see nature in all her energy, will contemplate with astonishment the Glaciers of Geitland, covered with ever-during snow ; Hecla showering fire over the bleak plain ; the roaring Geiser shooting up its boiling streams two hundred fathoms to-

* Particularly in the Kialnesinga Saga, and the Landnama Saga.

wards the skies ; the Avalanche, crushing man, and beast, and house, in its descent ; the waves casting forward towards the shore huge rocks of Greenland ice ; and, high above all, the Boreal lights dancing and playing over the whole field of heaven—retiring for a moment from human eye into the infinite regions of space—then coming back with fresh lustre, and sparkling with every colour, and shape, and variety of flame.

Human ingenuity, ever ready to catch at the faintest analogies, has attempted to establish some connexion between the eruptions of Hecla and of Vesuvius ; but the notion is perfectly chimerical, and entirely contradicted by facts. From attending to the date of their respective performances, we will venture to say, that they are entirely ignorant of each other's existence ; and have never dreamt of entertaining that submarine correspondence, so acutely imputed to them by naturalists.

In that part of their book which relates to the natural history of Iceland, Olafsen and Povelsen occasionally display a credulity truly laughable. We all know that foxes love eggs. When the Iceland foxes come to the spot where they expect to find crows eggs, they begin to wrestle, in order to find out which is the strongest. This done, the Samson of the foxes takes his next neighbour's tail in his teeth, who takes another tail in his turn, and so on, till the vulpine string, hanging over the rock, is long enough to reach the eggs ; which are then handed up, by some unintelligible process, from one to another, till they arrive in safety at the top ! Messrs Olafsen and Povelsen do not implicitly believe this story, though they are more than half persuaded of its truth. They are wholly devoid, however, of this tinge of scepticism in relating the navigations of the Iceland mice. When they wish to cross a large and deep river, six of them embark upon a bit of dry cow dung, their provision in the middle of this ex-vaccine vessel—their faces turned to each other, and their tails in the water, to perform the functions of rudders. The Danish missionaries see no reason to question the authenticity of this anecdote.

In page 65. vol. II. they relate the existence of some curious mineral waters at Hitasdal, which have such a power of intoxication, that they are equal in strength to the strongest beer. They took considerable pains to examine the earth adjacent to the Geiser, and the other hot springs ; and uniformly found that the heat did not reach above 12 or 14 feet ; at which depth, they came upon the hard lava rock, the production of some previous volcano. In an examination of this kind, a fresh, though inferior, geiser broke out of the ground, and shot a large column of hot water upwards to a considerable height ; a phenomenon

phenomenon which it continued to exhibit at intervals while they remained in the neighbourhood.

One of the most striking natural curiosities in Iceland, is the *Ilværvælde*, or roaring mountain. Through an aperture in the rock, of three or four inches in breadth, a thick smoke rushes, with a noise loud enough to drown the strongest human voice at the shortest distance; and the blast is so prodigiously strong, that small stones, which they attempted to fling into the aperture, were driven out to a considerable distance. It should be observed, that the whole of this survey of Iceland was made before the year 1760, and consequently before the great discoveries in aerial chemistry; so that the report of Messrs Olafsen and Povelsen contains no sort of information respecting the gaseous productions they met with; nor indeed do they seem to be informed even up to the state of chemical science of that period. The Academy of Copenhagen appears to have had it in contemplation to procure as much knowledge for as little money as possible. The Iceland travellers are perpetually complaining of bad and broken instruments, and do not appear to have been possessed even of these in great abundance.

The character of the Icelanders is good. They are calm, discreet, orderly and serious in their religion, capable of great labour of mind and body, and accustomed to live upon little; not abounding much in men of genius, but producing, in the various universities of the North, many zealous and indefatigable scholars, who have struck with successful vigour into the most intricate and untrodden paths of literature. They are as fond of their country, as all mountaineers are said to be. Not that we are thorough converts to this supposed connexion between altitude and patriotism; but we leave the hypothesis as we find it.

The potato, that modest vegetable of Catteau, has with some difficulty found its way into Iceland; but they have in vain attempted to introduce the culture of grain. The Danish government has even been at the expence of sending over Jutland farmers for that purpose; but the corn has either never appeared above ground; or appeared, and never ripened; or ripened, without growing hard enough for thrashing; till, at length, the most sanguine improvers have been compelled to relinquish the undertaking; finding it easy enough to drill a field, but impossible to prepare a climate for their crops. Messrs Olafsen and Povelsen think that the soft corn might be baked after reaping, as it is in the island of Ferro. But this is bad policy; for if price is disregarded, any thing may be grown any where. The object is not to produce, but to produce with economy; and where the difficulties

difficulties are so great in effecting any one object, it is better to relinquish it for another more adapted to the genius of the climate.

Nothing is more striking, in this publication, than the decay of power and population in Iceland. But it has been for centuries the prey of famine,* epidemic diseases, and murrain among the cattle. Every canton in Iceland contains vestiges of deserted farms; but towards the north, there are whole cantons entirely deserted; and others in the district of Skagefrið so languidly cultivated, that they may almost be said to be abandoned. In the canton of Flioten, there have been twenty-five large farms abandoned since the beginning of the last century. The causes of this melancholy desertion, besides the physical ones we have already mentioned, are, the avarice and negligence of the Danish government: for, at the period to which this report refers, the improvements in the Iceland commerce, suggested by Bernstorff, had not taken place. The trade with that country was a monopoly farmed out to a set of merchants, who, of course, sold to the Icelanders the worst commodities at the highest prices; and the people, who could scarcely contend with the evils of climate, were doomed to struggle with all the discouragements of a bad government. The demand for men is so easily supplied, and the blanks occasioned by unusual mortality so soon filled up, that political economists would hardly allow the various pestilences, by which Iceland has been affected, to be a sufficient explanation of its present reduced population. But this question is quite a relative one; and the rapidity with which human life is renewed, must be proportionate to the advantages of the particular country in which the experiment is to be tried. A country, with every blessing of climate, soil, and government, may fill up the vacancies occasioned by a pestilence in fifteen years, which such a country as Iceland could not supply in three hundred. It is true, that nature always reproduces, but with such different degrees of facility, that a serious mortality may, for a great length of time, be a very sufficient explanation of a decayed population. Independently of all this, there are strong, but slow causes, always at work, to dispeople Iceland, Holland, and the fag-ends and corners of the earth. They are originally peopled only by the

* The distress in Iceland is frequently so great, that their cows and sheep are nourished with the head, entrails, and fins of fish, and, in years of less severe distress, with the fish themselves. Mr Stroem, in his *Sandmamoria*, has a very long and minute discussion upon the use of the heads of red herrings, and dried stock-fish, in feeding cows, p. 381.; a topic, in rural economy, strangely overlooked in this country.

the victims of persecution ; and there is always a strong temptation to quit them, in proportion as the facility of communication increases among civilized people, and as peace and liberty are to be enjoyed in more beautiful climates. Patriotism, resulting from early association, and from principle, prevents any thing like exact proportion between population and the maximum of moral and physical good which human beings can obtain. But, *ceteris paribus*, there is a slow tendency in mankind to escape from the violence and sterility of nature to the scenes of her goodness and glory ; and this, in the course of ages, will leave Iceland to the seals and the bears from whom it was originally wrested, and to whom it had better always have been left.

Messrs Olafsen and Povelsen may perhaps be extremely displeased with the low estimation in which we hold the object of their survey ; but we fairly own, we owe to these Reporters some little grudge for their merciless and needless prolixity, which we only remember to have been exceeded by a very worthy country clergyman, who left behind him sketches for a history of his parish, amounting, in bulk, to two large quarto volumes, and which his executors, who were luckily not of the same parish, with much wisdom committed to the flames. Upon many important topics, the education and the commerce of Iceland for example, these travellers are very deficient. They have found out the secret, if any secret it be, of writing much without writing to the purpose, and of exhibiting quantities of truth without affording satisfaction. As a book of reference, their report is not without its value. Those who collect libraries will do well to add it to their mass. He who has no particular purpose in perusing it, but wishes to gain information about Iceland, without paying too dearly for it in patience and time, had better listen to the warning voice of Reviewers, and decline acquaintance with Messrs Olafsen and Povelsen.

ART. VIII. *Georg Christoph Lichtenberg's Vermischte Schriften, nach dessen tote herausgegeben. Göttingen. 1803. 5 bände.* The Miscellaneous works of George Critophe Lichtenberg, published after his death. Göttingen. 1803. 5 vol. 8vo.

GERMAN literature has scarcely ever been fairly appreciated in our country ; it is either harshly and injudiciously censured, or foolishly and enthusiastically praised ; it has had partisans and opponents in plenty, but few intelligent judges. Nor is it perhaps very wonderful, that a just opinion should not be immediately

mediately formed by foreigners upon the merits of a class of writers that have been known at home for little more than fifty years. It is generally known, that the authors of Germany after the revival of letters, composed for some centuries chiefly in the Latin tongue, and neglected their own. In these circumstances, they could not easily become popular; and although they displayed astonishing perseverance and great learning and acuteness, together with as much invention, perhaps, as any of their neighbours who devoted themselves to similar studies, their labours appear to have been rewarded by the general derision of Europe. A German or Dutch commentator became proverbial for dulness. When they at last became ambitious of the higher rewards of literature, and began to compose original works in their vernacular tongue, they had innumerable difficulties to encounter. During the earlier part of the last century, and the whole of the foregoing, every circle or petty principality had its peculiar dialect, scarcely intelligible to the inhabitants of the adjacent territories, and full of phrases completely foreign to the more remote provinces. The two grand divisions of Roman-Catholic and Protestant, or Austrian and Prussian, opposed a strong bar to the internal intercourse of the nation, and to the cultivation of its language. No common metropolis existed, no national theatre, parliament, church or law court. Each nation detested the political and religious establishment of its rival, and communicated to the individuals of which it was composed, a degree of hatred, greater even than that which has so long divided the English and French. The smaller states, nearly three hundred in number, adopted the animosities as well as the politics of their superiors; and it is so far from being wonderful that Germany should be behind the other great European states in the cultivation of its language, that our astonishment should rather be excited by the view of the improvements which the last fifty years have produced. We must not, however, compare the German style in the middle of last century, with the style of England, France, or Italy, at the same period, but rather with the French in the reign of Henry IV., the English in that of King James I., and the Italian in the fifteenth century, when their first great poetical compositions, which usually fix the language of nations, had just begun to produce their effect. The works of Haller, Klopstock, and Wieland, did this for the language of Germany; and established, for their successors, a standard of classic vigour and elegance only about half a century ago.

The Germans now, however, write as correctly as any other nation. Some of their classical authors do great honour to modern

dern literature, and prove that the opinion of the great Prussian Monarch was fallacious, when he declared it impossible to compose a work of taste in his native tongue*. Had he been as familiar with the volumes of Wieland, Goethe, Garve, and Herder, as with those of Voltaire or D'Alembert, he would scarcely have made this assertion. The difficulty of their language, and their unhappy practice of translating every publication that became popular among their neighbours, made it generally believed, that the Germans possessed no stores but what were borrowed either from the ancients, or from Britain or France; and that neither instruction nor amusement were to be derived from their original compositions. Some admirable essays of Mr Lessing, however, found their way to England, and conducted, along with the illustrious names of Haller and Klopstock, to convince the few who could read the originals, that the Germans could not only translate, but write what was worthy of being translated. During the American war, the intercourse with Britain was strengthened by many well known causes. The German officers in our service communicated the knowledge of their books and language. Pamphlets, plays, novels, and other light pieces, were circulated in America, and found their way, after the peace, into England. The name of Lessing, revered by every well-educated German, became almost as familiar, as that of Addison or Fielding, and paved the way for the less respectable works of Schiller, Kotzebue, and Iffland. These authors, perhaps the most popular dramatic writers of the present day in Germany, are well known over the North of Europe; and the works of the two former are at least sufficiently known and admired by the inhabitants of this country. Sheridan has condescended to be the imitator of Kotzebue; and Schiller, unquestionably a man of uncommon genius, is the avowed model of those poets, novelists, and playwrights, who, without any genius at all, have succeeded in captivating the public attention, by an engaging display of furious lovers, frantic heroines, blasphemers, fatalists, and anarchists of every description.

It is curious to observe the vicissitudes of literary fashion, and the alternation of national imitation. The Germans were slavish translators of our *belles lettres*, philosophy, and history, for a century. A similarity of national taste prompted them not only to admire Shakespeare, Milton, Shaftesbury, and Locke, and our historians Hume, Robertson, and Gibbon, who are as well known, and as much relished in Germany as in Britain, but also to adopt the prejudices which have bestowed a certain degree of reputation

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* *Essai sur la littérature Allemande.* Berlin 1780.

on the affectation of Sterne, and the flowery fanaticism of Hervey. When it was our business to translate, however, we scarcely succeeded so well. When the scarcity of domestic genius compelled us to have recourse to importation, we carefully picked out all the dross, and as cautiously threw away the valuable ore; so that, for these fifteen years, it has been a common and a reasonable opinion in that country, that profligate plays, forbidden to be acted in their most cultivated provinces, and novels inculcating suicide or adultery, constitute, in the opinion of the British nation, the most valuable part of German literature. Among ourselves it has sometimes been supposed to form the whole of it; and hence the odium thrown upon it, and the belief which has prevailed, of the atrocities, political and moral, of the principles of German literature. We possess, indeed, very few translations of respectable German works; and the mischief that was reasonably apprehended from the contagion of those we have had the folly to receive, has been sufficient to induce many to reject, in the lump, the productions of that country. The Germans complain of us on this account, and with some appearance of reason.

The author, whose works we are now to review, and who made a considerable figure in the literary circles of Germany for many years, wished to remove those prejudices, by opening the eyes of the liberal-minded of both nations. He had passed some time in England, and been admitted to the best company in the metropolis and the country. He was intimately acquainted with ancient and modern literature, and possessed much critical acumen, and taste, and humour. The innovations he condemned in his own country have since become ridiculous, and have owed their repression, in some degree, to his exertions; for he was indefatigable in assailing them in his writings, which, in the forms of Almanacks, Magazines, and Reviews, had an extensive circulation through the whole German empire for thirty-six years. He resided in Göttingen during the greater part of his long literary career, and witnessed the rapid advancement, together with the dangers and aberrations of the literature of his country. Many of the charges brought against it by the King of Prussia and the French Literati, as well as those which we are accustomed to repeat from hearsay, he has examined in a very skilful manner, and with such exemplary impartiality, that if he had not written in the language of the country, he might have been mistaken for a native of France or of England. His dispute with Zimmerman, on the subject of Lavater's physiognomy, made some noise in Germany, between the years 1771 and 1778. The merits of that controversy are amply discussed in the 3d volume of this work, which, with the 4th and 5th, contains a republication of detached

ed papers, printed at different periods, and in various forms, by the author. They relate chiefly to matters of temporary interest ; and many of them seem scarcely worthy of being snatched from the oblivion into which they were ready to sink. Like many learned men in Germany, M. Lichtenberg devoted his talents and pen to miscellaneous literature,—writing, upon all subjects, with much industry, and with little connexion. His largest work is his ‘ Illustrations of Hogarth’s Prints,’ which is not included in this compilation ; nor do we find in it his defence of the hygrometer, and De Luc’s theory of rain, occasioned by Mr Zylius’s dissertation on those subjects, published at Berlin in 1795.

The two first volumes of the collection before us, contain miscellaneous remarks on the German literature, of which our readers may be curious to acquire some knowledge. These are found in detached memoranda, kept by the author during the greater period of his life, and are printed with scarcely any regard to dates or arrangement. The editor, however, gives the posthumous pieces under different heads, in the following series : 1. Philosophical remarks. 2. Psychological remarks. 3. Moral remarks. 4. Observations on man. 5. Physiognomical remarks. 6. Political, literary, satirical, &c. remarks and observations. Mr Lichtenberg appears to have projected a long satirical poem, the topics of which we shall enumerate, merely to show our readers the opinion of an acute and experienced man, respecting the actual condition of German morality and taste.

‘ Objects of satire in my poem.—Fashions and dresses. Bad theatre. Foreign law. Irreverence for old age. Indifference of our Magistrates. Affectation of students. Cringing of professors to rich pupils. Forced marriages. Situation of bastards. Low marriages. Sensibility. Novels. Lunacy. Trifling causes of wars. Soldiers. Bad roads. Games of chance. Forgetfulness of original equality. Newspaper advertisements. Canonization. Ignorance in cloisters. Monks. Exclusive right of the nobility to the higher offices. Anglo-mania in gardening. Inquisition. Superstition of the rabble.’ Vol. II. Introd. p. 12.

This intended poem was never finished, and probably never begun.

In the beginning of his work, M. Lichtenberg describes the symptoms of a violent intellectual epidemic, that committed great ravages upon the taste of the Germans about thirty years ago, and threatened its absolute destruction : he terms it the rage der empfindsamen und kraftigen, i. e. the soi-disant men of genius, who pretended to excessive sensibility, originality, and force. These personages boasted of being superior to the trammels of rules, and to the prejudices or advantages of education. They affected to exclude every sentiment from their works, which

was found in any former writer on similar subjects. No law of the drama, no order in reasoning, no consistency of parts, no method, symmetry, or precision, were desired or admitted. A wildness of language, confused gigantic imagery, conveyed in the most bombastic, or perhaps in the most gross and familiar terms, were made the vehicles of silly and pernicious doctrines. Germany was pestered, for upwards of twenty years, with the effusions of these *Geniuses* (Genies); many of their writings still continue to be admired, and influence, in some measure, the philosophy and language of the national writers. Our author describes their first appearance with some humour. (Vol. I. p. 67.)

' Before the battle of Rosbach, the idlers were in great want of novels. We read English ones indeed, insomuch that we knew every street in London, and the gallows at Tyburn, as well as our own *. We ogled in the Park, and did our best in Covent-Garden, and so gave you, O German readers, many a novel. "But," said you, "this is nothing; we must have German original characters!" We were tempted to answer, somewhat rudely, "Go to those who sent into the world and educated our dear countrymen—such as they are—and don't blame us for describing the creatures we see and hear. Can we help the want of originality?"—"Then give us poems!"—"Do we not give you tons of them, from the breadth of an inch to that of half a foot, and of every possible length?" All would not do. You gave the word of command: and although we poor fellows have ever had one eye turned to the left bank of the Rhine, and the other to the west of the English Channel, something original must positively be produced to you. You insist on our throwing away our old quills.—There they go—they fly from our hands like the leaves in autumn. Behold at once thirty Yoricks starting up, riding their hobby-horses round a point which they might have reached at one step the day before: and the man who formerly was conscious of no inspiration from contemplating the ocean or the starry heavens, now pours forth sentimental and devotional exclamations on a snuff-box. Shakespeares rise up in dozens; if not all at once in tragedies, at least in reviews—and there you see a combination of ideas which never met before out of Bedlam. Space and time are clapped up in a nut-shell, and shot forth into eternity. In the twinkling of an eye, we looked deep into the human heart: gossiping silly histories become profound knowledge of human nature. Even in Boeotia, † yonder a Shakespeare arises, who, like Nebuchadnezzar, eats grass

81

* In Germany, every town has a small elevation close to the principal gate, on which a gibbet is erected, for breaking malefactors on the wheel.

† The south and eastern parts of Germany are so called by the Protestants of the northern circles.

gras instead of Frankfort loaf-bread ; and makes our language original, by violating all its grammar. Lower Saxony snuffles her odes ; sings, with expanded nostrils and open throat, of patriotism, of style, and of a country which wishes her at the devil. In every corner you hear songs and novels, far more difficult to understand than to compose.—Well, we had originals now ; but what said the public ? “ Gentlemen authors, ye are no originals—ye are poets from poets, not from nature. Our capital stock is not in the least increased ; we only exchange one coin for another of baser metal, and receive lead and brass for our fine gold. Ah, wretched originals ! ” &c.

There is much of this coarse and flippant raillery in the volumes before us. Perhaps the want of dignity in the mode of chastising the absurdities of the Energists, contributed to produce the effect intended by the author—that of raising the voice of the reading-rabble against them. It would not be easy indeed to point out any eligible plan for annihilating such vermin, in a country so divided and extensive as Germany, without destroying altogether the liberty of the press.

Another evil which afflicted Germany, and excited the wrath of our author, at the period in question, was the *mania* of physiognomy, spread by the writings of Lavater. Lichtenberg, although he had no respect for that visionary writer, seems to have entertained serious apprehensions as to the consequences of his speculations ; and forgetting that a practical science, which rested on false foundations, would soon expose its own futility, he thought it his duty to denounce it as a dangerous and detestable illusion. He accordingly published at Gottingen, in 1778, a pamphlet (inserted in the 3d vol. of this work), written with considerable spirit and acrimony—‘ *Ueber Physiognomik wider die Physiognomen*, ’—on physiognomy, against the physiognomists ; which led him and others into a controversy of many volumes, and many years. His keenness on this trifling subject cannot be easily comprehended by those who are strangers to the childish cupidity with which every thing new, or seemingly new, is grasped at in Germany, and to the universal interest which the immense population of that country takes in every learned controversy. Believing the foundation of physiognomy to be altogether ideal or false, he had no patience with those who built upon it. His opinion of that science is always expressed in the language of contempt ; but, in the following passage, he condescends to reason upon it.

‘ We have not a completely clear representation of the human face, and consequently cannot teach physiognomy. The rules contain no more than the reference of detached parts to the character. The countenance of a man who has cheated me, I know so well, and represent in so lively a manner, that I remark the slightest deviation in a face resembling

resembling his, as readily as if they were totally different, although I am not able to express, and still less able to paint, wherein the difference consists; and yet, from the greater or less resemblance which others bear to that man, am I ready to conclude with respect to their characters, because the idea of cheating is connected with the sensation which I have felt. A feature of the countenance will be associated not so much with the character supposed to belong to itself, as with the action which it recalls. I have always found, that the persons who attached most credit to physiognomical observations, were men of little knowledge of the world: On the contrary, men of profound experience pay least attention to the rules on which they are made,' &c. Vol. II. p. 178.

He adds, in p. 181, 'When physiognomy arrives at the perfection expected by Lavater, we shall hang children before they have committed the crimes which deserve the gallows. There will, every year, be a physiognomical *Auto da Fe!*—How provoking is it to perceive, that Lavater found more in the noses of some authors, than we can find in their writings?'

The satirist of Goettingen did not always confine his speculations to the trifles of the day. The system of education adopted by the greater part of his countrymen, both in schools and colleges, had fixed his serious attention. He had witnessed some changes, introduced in consequence of the light reflected upon that important subject by J. J. Rousseau and his followers in France, and by Feder of Erlangen, and Basedow of Hamburgh, in Germany. Of some of these he seems to have approved; but to the greater part he applies that unsparing ridicule with which he always assails the pedantic affectation of originality, and the senseless love of change. Although fully aware of the advantages of a regular education, and acquainted with all that had been urged on both sides of the question, he never forgot that the substantial improvement of the character depends much less upon artificial instruction than is generally believed. The most careful education cannot create a single new faculty; and in a civilized age, no neglect can prevent the developement of those that exist: their growth may be retarded by unfavourable circumstances, but their vigour may be more radically injured by excessive cultivation. Professor Lichtenberg never thought of declaiming against the use of what it was his business to enforce—an affiduous application to study. But he thought that his countrymen pushed the mechanical and coercive part of their system ~~a~~ great deal too far; and, from our personal knowledge of some German seminaries, we do not hesitate to adopt the whole extent of his opinion. The most cultivated Germans, namely the Saxons (a population of 8,000,000), benumb the faculties, and distort the perceptions of their youth, by a course of

of premature study, before nature has attained the degree of vigour requisite for the developement of her powers. The body, laid under restraint at the age of four or five years, suffers along with the mind. By the precision of bookish discipline, and the daily confinement of the faculties to the narrow limits of a school-house and a duodecimo, the course of infantine thought is impeded or perverted, in the same manner as tight bandages injure the circulation of the blood.

' I believe,' says Lichtenberg, p. 226. Vol. I. ' that if our pedagogues obtain their wish, I mean, if they once get the education of youth completely under their controul, we shall never more see a great man amongst us. God forbid that man, whose teacher is the whole circle of nature, should be regarded as a mere lump of wax, on which any professor may stamp at pleasure his own conceited image. The object of all education is to form virtuous, intelligent, and strong-bodied men : how we promote this object by our present course, I should find it difficult to comprehend. Teachers, in schools, and in universities, fix the character, not of individuals, but of the nation ; and this truth is almost always forgotten. I am so far an enemy to our incessant reading in early youth, that I would as soon insist on seeing a boy have a brandy-bottle, as a book continually in his hands. Children suek their mothers for nourishment to their bodies, and, amongst us, their schoolmasters for food to their minds.'

Of the importance of a classical education, however, and of an intimate acquaintance with the writers of Greece and Rome, in their original tongues, Professor Lichtenberg entertained, through his whole life, the same opinion. He regarded both the matter and the style of the ancient classics as alike admirable ; but he thought that those studies were begun too early, and that it was principally from this cause that they were so often abandoned at a maturer period of life. To the vulgar objection, that too much time is lost in learning the words of the sentiments which we might obtain by means of translations, he gave the plain answer—That a man can never learn a language, without adding to the stock of his ideas ; and that the better the language is, (and where shall we find any equal to the Greek and Latin ?) the more correct will be the judgment, and the more vigorous the perceptions of him who learns it. With regard to the learned tongues, they form at once, even considered merely in their structure, the best code of laws for taste, and the best models for logical reasoning and argument. No man, indeed, who can read the classics, would exchange the fruit of the time spent upon them for any other attainment which his earlier years could have made. It is the respect which men of rank in England usually pay to a classical education, that drew from our author the following compliment, in which we heartily join in favour

of our Southern neighbours, and which is valuable, as coming from a man little accustomed to the complimentary style.

‘ We ought to judge, in matters of education, rather from experience than from mere reasoning. We should inquire what nation has produced the most active, and the greatest men; not indeed the greatest number of compilers and of book makers, but of the most intrepid, the most acute, accomplished, and magnanimous characters? This is very probably the *English nation.* ’ Vol. II. p. 194.

A considerable proportion of M. Lichtenberg’s miscellaneous remarks, refer to ethics and politics. He is by no means a zealous admirer of the Kantian philosophy, which has made so much noise in Germany, or of that political revolution which looks with so malign and ominous an aspect on all the European nations. His sentiments on these subjects we do not state at length, as they coincide, on the former, with those which we have expressed in our review of Villers’s philosophy of Kant, and, on the latter, with those of almost every rational spectator of the last years of the last century. One of the reasons, however, which he assigns for the apparent attachment of some of its votaries to the tortuous and teasing philosophy in question, we cannot help noticing; and it will perhaps appear to our readers who have been in Germany, to be as just, as it certainly is mortifying, to common-place metaphysical pride.

‘ Many doctrines of Kant’s philosophy are perhaps clearly understood by none; and each of his disciples, believing that another understands them better than himself, is either contented with an obscure conception of them, or perhaps sometimes assents from a persuasion “ that others understand what he unfortunately wants capacity to comprehend.” ’ Vol. II. p. 84.

To the perpetual refuge of the Kantians, that those who reject their philosophy do it from ignorance of its value and doctrines, it may be modestly opposed, (‘ *Siquidem philosophia, ut feritur, virtutis continet, et officii, et bene vivendi disciplinam,* ’)* that what is adapted only to particular understandings, and unattainable, after years of study, by men of ordinary good sense in other respects, cannot be calculated for general utility, and must probably be superfluous, if not false. This is the doctrine inculcated by the celebrated Herder in his *Metacritik*, and by Professor Plattner of Leipsic, in his very respectable publications: And, indeed, were there no other presumption against Kant’s innovations, but the circumstance of being uniformly opposed by the most enlightened men in Germany, who alone can be competent judges of a work which no man ventures to translate into other languages, and who consider it as a mere repetition of old, clumsy,

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* Ciceronis oratio in L. C. Pisoneum,

fy, metaphysical tricks; it would go far to determine against it every stranger to the German tongue, and every friend of rational and useful inquiry. Consistent with these sentiments is the following passage, which we give in the words of our rational and manly author, both as a specimen of his style, and a proof of his opinion upon this subject.

‘ Ich glaube, dass, so wie die Anhaenger des Herrn Kant ihren Gegnern immer vorwerfen, sie Verstaenden ihn nicht, so auch Manche glauben, Herr Kant habe Recht, weil sie ihn verstehen. Seine Vorstellungsfart ist neu, und weicht von der gewoehnlichen sehr ab, und wenn man nun auf einmal Einsicht in dieselbe erlangt, so ist man auch sehr geneigt, sie fur wahr zu halten, zumal da es so viele eifrige Anhaenger hat. Man sollte aber dabey immer bedenken, dass dieses verstehten noch kein Grund ist, es selbst fur wahr zu halten. Ich glaube, dass die meisten ueber die Frende, ein sehr abstractes und dunkel abgefasstes system zu verstehen, zugleich geglaubt haben, es sey demonstriert.’

Vol. II. p. 37.

To gratify our German readers, we add another passage from our author’s original, which is more likely to please other nations than his own.

‘ Es scheint, als wenn der Fleiss auch sogar den Dichter bey den Deutschen mache und machen muechte. Es ist, glaube ich eine gute Erinnerung fur unsre Landleute wenn sie auf Eminenz Anspruch machen wollen, sich Faecher zu wachsen, wo blos Fleiss und Urtheilkraft den Werth des Werks aufmachen, und lieber da weg zu bleiben, wo ein Senfkorn von Genie die vierzigjahrige Arbeit des studirten Nachahmers verdunkeln kann. Das Fliegen muss man den Voegeln ueberlassen.’ Vol. II. p. 346.

We conclude our extracts from this agreeable writer, by a sentence which may probably make some of our countrymen blush, although we fear the persons alluded to are not among the number.

‘ Die Englaender werden es durch Uebersetzung unserer Schriften dahin bringen, dass wir die gar nicht mehr uebersetzen *.’ Vol. I. 240.

The duty which would now lead us to point out the blemishes of the work under our review, is almost completely satisfied, by suggesting that this is a posthumous publication. The folly of this public exhibition of Mr Lichtenberg’s whims, prejudices, and inconsistencies—of his attention to trifles, and of his vanity in committing to paper, as his own original thoughts, the ingenious speculations of others, with which either reading or conversation supplied him, is not to be laid to his charge. All the blame attaches to his editor. He himself never meant them to

* The English translate so many of our works, that we cannot think theirs worth the translating.

see the light. But the editor is to blame, not only for what he has done, but, we believe, also for what he has left undone. We suspect that some of the author's most valuable lucubrations are altogether suppressed; for we find very little in these volumes to throw light upon the peculiarities of the German theatre and of the German romance. This is the more surprising, as we have been informed by some of his acquaintance, that he wrote much upon these subjects, and that his opinions of some living authors of eminence, founded on the justest appreciation of their characters and writings, were calculated, in a high degree, to amuse and instruct his readers. They have perhaps been suppressed, from delicacy to the feelings of these authors. To many of our countrymen, indeed, it will be a matter of indifference, that all which refers to German *belles lettres* should perish; and we are aware that much may be said against a large proportion of the dramatic writings and novels of that country. But we cannot see the reason of forgetting the *ne quid nimis* on that subject, more than on any other. The plays and romances which we borrow from the Germans, and we often borrow unkindly, must surely possess some substantial excellences, or it is impossible that our artists should meet with encouragement to translate, imitate, and act them; and therefore, while we reprobate the morality of many of them, we lament the loss of the learned and acute Lichtenberg's animadversions upon them and their authors. The hurry and carelessness with which the selection of these miscellaneous essays has been made, is by no means to be pardoned for the silly reasons which are offered in the prefaces to the first and second volumes. The honour of the dead should not be sacrificed either for the profit or the vanity of the living. With all its imperfections, however, of incoherency, desultoriness, satirical bitterness and frivolity, this work will be often read with pleasure: and although its author is not entitled to take his place as a man of first-rate genius, or extraordinary learning, his character may be fairly summed up in the words of the independent and magnanimous sage:

‘ Hier seh ich laechelnd nun des Lebens bunte Scenen,
Neumodische Virgils, altfraenkische Mœcœnaen,
Gelehrte, die sehr oft sich selbsten nicht verstehn,
Tartuffen, die voll Zorns die stille Tugend schmaehn,
Kurz, Hochmuth, Hoffnung, Gleick, der Thoren ganzen Wahn,
Des Lebens ganze Mueh, seh ich gelassen an.’

ART. IX. An Account of Native Africans in the Neighbourhood of Sierra Leone. To which is added, *An Account of the Present State of Medicine among them.* By Thomas Winterbottom, Physician to the Colony of Sierra Leone. Hatchard, Piccadilly. Vol. I.

IT appears from the Preface of this book, that the original design of Dr Winterbottom was to write only on the medical knowledge of the Africans in the neighbourhood of Sierra Leone; but as he had lived among them some time in quality of physician to the colony, and had made many observations on the genius and manners of the various African nations which surround it, it was thought fit (*i. e.* profitable) that he should write one volume for general, and one for therapeutic readers. The latter has not yet come to our hands. The former we have read with pleasure. It is very sensibly and agreeably drawn up; and the only circumstance we regret is, that, upon the whole, it must be rather considered as a compilation from previous writers, than as the result of the author's experience: not that he is exactly on a footing with mere compilers; because every account which he quotes of scenes to which he is familiar, he sanctions by his authority; and, with the mass of borrowed, there is a certain portion of original matter. It appears also, that a brother of the author, in company with a Mr Watt, penetrated above 400 miles into a part of Africa totally unknown to Europeans: but there are very few observations quoted from the journal kept in this excursion; and the mention of it served for little more than to excite a curiosity which is not gratified by further communication.

By the neighbourhood of Sierra Leone, Mr Winterbottom means the windward coast, or that portion of the western shore of Africa which extends from the river Senegal to the latitude of nearly 5° north, where the coast quits its easterly direction and runs away to the south, or a little to the east of south.

The whole of this coast is inhabited by a great number of independent nations, divided by different shades of barbarism, and disputed limits of territory, plunged in the darkest ignorance and superstition, and preyed upon by the homicide merchants of Europe. The most curious passage in this section of the work, is an extract which Mr Winterbottom has given us from a report made to a Committee of the House of Commons by the Directors of the Sierra Leone Company; and which (as we conjecture, from Dr Winterbottom's mode of expressing himself, it has never been printed) we shall extract from his book.

'A remarkable proof,' say the Directors, 'exists in the neighbourhood of Sierra Leone, of the very great advantages of a permanent, though very imperfect system of government, and of the abolition of those African laws which make slavery the punishment of almost every offence. Not more than seventy years ago, a small number of Mahomedans established themselves in a country about forty miles to the northward of Sierra Leone, called from them the Mandingo Country. As is the practice of the professors of that religion, they formed schools in which the Arabic language and the doctrines of Mahomet were taught; and the customs of Mahomedans, particularly that of not selling any of their own religion for slaves, were adopted; laws founded on the Koran were introduced; those practices which chiefly contribute to depopulate were eradicated; and, in spite of many intestine convulsions, a great comparative idea of civilization, unity, and security, was introduced; population, in consequence, was rapidly increased; and the whole power of that part of the country in which they are settled has gradually fallen into their hands. Those who have been taught in their schools, are succeeding to wealth and power in the neighbouring countries, and carry with them a considerable portion of their religion and laws; other chiefs are adopting the names assumed by these Mahomedans, on account of the respect with which it is attended; and the religion of Islam seems to diffuse itself peaceably over the whole district in which the colony is situated—carrying with it those advantages which seem ever to have attended its victory over African superstition.'

Agriculture, though in a rude infant state, is practised all along this coast of Africa. All the lands must be strictly appropriated in a country, and the greater part cultivated, before any can be cultivated well. Where land is of little value, it is cheaper and better to till it slightly than perfectly; or rather, perfection, under such circumstances, consists in idleness and neglect. The great impediment to be removed from the fresh land which the Africans mean to cultivate, are those troublesome weeds called trees; which are first cut down, and then, with the grafts, set fire to at a particular season of the year. This operation is performed when the Pleiades, the only stars they observe, are in a certain position with respect to the setting sun. At that season, the fires are seen rolling in every direction over the parched and inflammable herbage; and the blazing provinces are discerned at an immense distance in the night by ships approaching the coast. At this period of Arson, it is not safe to travel without a tinder-box; for, if a traveller is surprised by the pursuit of the flame, his only safety consists in propagating the same evil before, by which he is menaced behind; and, in trudging on amid the fiery hyphen, multiplying destruction in order to avoid it. The Foolahs, who seem to have made the greatest advances in agriculture, are, however, still ignorant

ignorant of the use of the plough, though Dr Winterbottom is quite persuaded they might easily be taught to use cattle for that purpose.

' There came,' says the Doctor, ' during my residence at the colony, a chief, of considerable importance, from the river Gambia, attracted by curiosity, and a desire of information. The man, whose appearance instantly announced a mind of no common cast, was so much struck with what he saw there, that, before he went away, he engaged in his service two of the most ingenious mechanics in the colony, one of whom, a carpenter, among other things, was to make a plough, and the other was to teach his people the art of training oxen for the draught, and fixing them to the yoke. *For a further account of this person, see the Report of the Directors of the Sierra Leone Company. London, 1795.*'

It is curious to remark, that where any instance of civilization and refinement is discovered in the manners of a barbarous people, it exists in a much higher degree than the same virtue in nations generally refined. There are many single points of barbarous courtesy much more rigidly adhered to than the rules of European politeness would require. We have often remarked this in the voyages of Captain Cooke, among the islands of the Indian Archipelago; and there is a very remarkable instance of it among the natives of this coast. The houses (says Dr Winterbottom) have seldom any other opening than the door, of which there are usually two opposite to each other. These serve the purpose of keeping up a current of air; they also admit the light; and afford an exit to the smoke of the fire, which is made in the middle of the floor. The entrance of a house is seldom closed by any thing but a mat, which is occasionally let down, and is a sufficient barrier against all intruders. The most intimate friend will not presume to lift the mat and enter, unless his salutation is returned. Nay, when the door is thus slightly closed, a woman, by pronouncing the word *Mooradee*, (I am busy), can prevent her husband from entering, even though he is assured she is entertaining her gallant. His only remedy is to wait for their coming out.

The explanation of these insulated pieces of superlative refinement among savages, frequently is, that they are not mere ceremonies, but religious observances; for the faith of barbarous people commonly regulates all the frivolous minutiae of life, as well as its important duties; indeed, generally considers the first as of greater consequence than the last. And it must be a general fact, at all times, that gross ignorance more tenaciously adheres to a custom once adopted, because it respects that custom as an ultimate rule, and does not discern cases of exception.

ception by appealing to any higher rule upon which the first is founded.

The Africans are very litigious; and display, in their law-suits or palavers, a most forensic exuberance of images, and loquacity of speech. Their criminal causes are frequently terminated by selling one of the parties into slavery; and the Christians are always ready to purchase either the plaintiff or defendant, or both; together with all the witnesses, and any other human creature who is of a dusky colour, and worships the great idol Boo-Boo-Boo, with eleven heads.

No great division of labour can of course be expected in such a state of society. Every man is a city in himself, and is his own tailor, hairdresser, shoemaker, and every thing else. Among the Fookahs, however, some progres has been made in the division of employments. The tanner and the blacksmith are distinct trades; and the ingenuity which they evince in overcoming obstacles, by means so inadequate to those which Europeans possess, may convince us what a stock of good qualities human nature has in store for cases of emergency. They put to sea canoes of ten tons burthen, hollowed from a single tree; and although they are ignorant of the use of the potter's wheel, make earthen pots fit for every domestic use. Dr Winterbottom thinks they may have learnt their pottery from Europeans; but if this is true, it is rather singular they were not instructed by the same masters in the use of the potter's most convenient and most prominent instrument. The common dress of the men consists in a shirt, trowsers, woollen cap or hat, which they buy of Europeans. Those who can afford it, are fond of decorating themselves in all the second-hand splendour they can purchase at the same market; and Monmouth-Street embarks its decayed finery for the coast of Africa, where Soosoo rakes and loungers are joyfully vested in the habiliments of their Bond-Street predecessors. The dress of the Pagan African is never thought complete, unless a variety of gree-grees, or amulets, be superadded; these are to guard against every possible accident; but, as Dr Winterbottom observes, are such very cumbersome protectors, that in all real dangers they are commonly thrown away. The Mahomedan religion is inimical to dancing, singing, and all the lighter species of amusement. Riding on horseback is the only exercise of those Africans who have adopted this dull faith. Sedentary amusements, such as reading and writing, which flatter the literary pride with which they are puffed up, are most congenial to their habits. The collation of manuscripts, which they perform with industry and accuracy, takes up much of their time. —The Pagan African, on the contrary, is commonly a merry, dancing

dancing animal, given to every species of antic and apish amusement; and as he is unacquainted with the future and promised delights of the Arabian prophet, he enjoys the bad music, and imperfect beauty of this world, with a most eager and undisturbed relish.

There is something so natural, and so closely derived from human governments, in the notion of the immediate interference of Providence, that mankind are only weaned from it by centuries of contradiction and discussion. In all cases, where crime is alleged, the accused is obliged to prove his innocence, by submitting to an ordeal. If he is burnt by red-hot iron, or scalded by boiling oil, he is immediately hurried to the gallows, with a zeal proportioned to the force and perspicuity of the evidence. In the neighbourhood of Sierra Leone, a curious species of pharmaceutical tyranny is resorted to for the purpose of ordeal. The bark of a particular tree, of purgative and emetic qualities, is infused into a large quantity of water, of which the prisoner is to drink about six calibashes quite full. If this judicial and inquisitive drink take a superior direction, and return by the aperture through which it is admitted, all is well; but if the least honourable and elegant of its powers predominate over the other, and it evince a disposition to descend, all opportunity of changing its line of egress is prevented, by the immediate elevation of the accused person to the gibbet.

The desire of penetrating into futurity, and the belief that some persons are capable of doing it, is as difficult to eradicate from the human mind, as is the belief in an *immediate* Providence; and consequently, the Africans not only have their ordeal, but their conjurers and magicians, who are appealed to in all the difficulties and uncertainties of life, and who always, of course, preserve their authority, though they are perpetually showing, by the clearest evidence of facts, upon what sort of foundation it rests. But the most singular circumstance in the history of barbarians, is, that tendency to form interior societies, comprehending a vast number of members, and rivalling the government in their influence upon public opinion. Such is the Areoy Society at Otaheite, and such the Society of the Purra in Africa. Every person, on entering into this Society, lays aside his former name, and takes a new one. They have a superior, whose commands are received with the most profound veneration. When the Purra comes into a town, which is always at night, it is accompanied with the most horrid screams, howlings, and every kind of awful noise. The inhabitants who are not members, are obliged to secure themselves within doors. Should any one be discovered without, or peeping to see what was going forwards,

wards, he would infallibly be put to death. Mere seclusion of females is not considered by the Society as a sufficient guarantee against their curiosity; but all the time the Purra remains in town, the women are obliged to clap their hands, to shew they are not attempting any private indulgence of *espionage*. Like the Secret Tribunal which formerly existed in Germany, it punishes the guilty and disobedient, in so secret a manner, that the perpetrators are never known, and, from the dread of the Tribunal, not often inquired for.—The natives about Sierra Leone speak of the Purra men with horror, and firmly believe that they have all strict and incessant intercourse with the devil.

This account of Africa is terminated by a single chapter on Sierra Leone; a subject on which we cannot help regretting that Dr Winterbottom has not been a little more diffuse: It would derive a peculiar interest from the present state of St Domingo, as the perils with which West India property is now threatened, must naturally augment curiosity respecting the possibility of a pacific change of that system; and we should have read with pleasure and instruction, the observations of so intelligent and entertaining a writer as Dr Winterbottom, who is extensively acquainted with the subjects on which he writes, and has a talent of selecting important matter, and adorning it. Dr Winterbottom says he has been in Africa some years, and we do not doubt the fact; he might, however, have written this book without giving himself that trouble; and the only difference between him and a mere compiler is, that he sanctions his quotations by authority, and embellishes them by his ingenuity. The medical volume we have not yet seen, but this first volume may be safely purchased.

ART. X. *The Second Part of the History of the Anglo-Saxons, from the Death of Egbert to the Norman Conquest.* In Two Volumes. By Sh. Turner, F. A. S. Cadell & Davies.

MR GIBBON has justly observed, that the Anglo-Saxon period of the English history ‘is familiar to the most illiterate, and obscure to the most learned reader.’ Gildas, whom the historian of the Roman Empire styles, with ambiguous compliment, ‘the British Jeremiah,’ is so pleased to find, or so determined to invent, topics for declamatory lamentation or praise, that it is difficult to distinguish the basis of truth from the fantastic superstructure of exaggeration and falsehood with which he has overloaded it. We cannot, at this distance of time, decide what parts of the history of Nennius were written by himself, and what were added or altered

altered by his friend Samuel, and it is of little consequence that we should ; for there seems to be nothing to be divided between them, but an abundance of the most contemptible and absurd fables. The Saxon Chronicle presents merely a muster-roll of names, and a chronological table of events. The venerable Bede has indulged his fondness, or exercised his talent for miraculous tales so freely and frequently, that his learning and judgment, which were certainly great, have seldom room for any beneficial display. These are the principal authors who have been consulted by the English historians. The industry and patience of research necessary to collect a few imperfect and thinly-scattered notices ; the constant watchfulness and discrimination requisite to guard against falsehood and to detect it ; and the confusion and perplexity arising from accounts frequently varying, and sometimes contradictory, have tempted many to prefer the guidance of fancy to that of sober investigation, and to indulge in conjecture, where they ought to have commented upon evidence.

The events of that period of the history of the Saxons which preceded their invasion of England, form no direct and necessary part of our national transactions : they have, accordingly, been either entirely overlooked, or very imperfectly treated, by our most accurate and industrious writers. Every thing, however, which relates to those tribes, from whom we derive our ‘ name, our laws, and perhaps our origin,’ must be the object of laudable curiosity. This curiosity, the first part of Mr Turner’s history is intended, and, in a considerable degree, calculated, to gratify. In it he has brought forward all the information which multifarious reading could supply, respecting the origin, the first settlements, and the continental transactions of our Saxon ancestors. The history of the Britons during the era immediately preceding the Saxon invasion, is also related with sufficient fulness and accuracy. In order to exhibit a more clear and interesting view of his subject, Mr Turner has occasionally introduced a sketch of the contemporary history of Europe ; particularly of those powers which, by their hostility or alliance, influenced the affairs of England. In the preface to the first volume, we are informed, that after having brought down the Anglo-Saxon history to the Norman Conquest, ‘ it is the intention of the author to review their laws, manners, government, literature, and religion.’

As the first volume of Mr Turner’s history is not now immediately under review, we shall notice merely a few of the most important points, in which we think he has been negligent, mistaken, or credulous. He has certainly dissipated his diligence and learning very unprofitably in endeavouring to trace the first notice of the Saxons, and to ascertain the etymology of their name.

name. These points are of so little real importance, and moreover, lie so far beyond the reach of probable conjecture, that no person, possessed of a judgement superior to his love of the parade of learning, would have suffered them to occupy so many pages of his work. When our author coincides with Mr Gibbon, in preferring the decisive and more probable account of Nennius, respecting the cause of the Saxon invasion, we know not whether to applaud his judgement, or to suspect his partiality. His admiration of Gibbon is so manifest, habitual, and constantly active, that we have more than once found him the echo of his sentiments, and the transcriber of his words. Mr Turner does not stop to inquire, whether three chiules could possibly contain a thousand men, the smallest number crowded into them by historians : * to us, it appears incredible. The keel and lower works alone of these long vessels were of timber : the sides and upperworks were of wicker covered with hides. It is evident that ships formed of these materials could have been neither very large, nor capable of enduring the stress of any great burthen. The vast number of these vessels, which often formed one fleet, also renders it probable that they could accommodate but few : we are informed by Mallet, that fleets of three hundred sail were not uncommon ; and that Harold Blaatand King of Denmark, and Count Hacon, commanded a fleet of seven hundred. Even in the eleventh and twelfth centuries, the ships of the Norwegian Princes were capable of holding only a hundred or a hundred and twenty men. † Our author states from Nennius, that about 453 A. D. a fleet of forty chiules, under Octa and Abifa, went to the north of the island. We admire his penetration, in having discovered this to be the meaning of the passage of Nennius to which he refers, and still more his credulity, if he believed the statement which he thought it contained. Mr Pinkerton has clearly shewn it to be one of the unintelligible fables of Samuel or Nennius. ‡

The chapters on the Welsh Bards and King Arthur are amusing and ingenious; but discover a degree of credulity, carelessness, or partiality, that is not to be tolerated in an historian who aspires to the confidence of his readers. We shall not go out of our way to examine, circumstantially, the evidence for the genuineness

* Our old writers are entirely silent about the number of men. Mallet says 1000 ; Hume 1600 ; Rapin 3000 ; and Verstegan 9000.

† See the authorities in Mallet, I. 258. It appears by an Icelandic saga, quoted by Mr Turner, II. 26, that the Norwegian ships, in the eighth century, generally held 60 or 70 well-armed men.

‡ Pinkerton's Inquiry, II. 286—290.

nuineness of the poems attributed to the Welsh Bards, and the consequent authenticity of the accounts which they contain of King Arthur. We shall confine ourselves to a few remarks suggested by Mr Turner's own assertions, in which it requires no great learning to discover contradictions.

Taliesin flourished about 560 A. D., and it appears, Mr Turner informs us, from one of his poems, that he was bard to the King of Lothlin or Scandinavia. We have three reasons for doubting the truth of this allegation. 1. Scandinavia was not called Lothlin till the ninth century. 2. There never was a King of Scandinavia: Norway, a very small part, was divided among at least twenty monarchs, till the ninth century. 3. Taliesin, a Celtic bard of Wales, cannot be conceived to have been in the service of a Gothic King in Scandinavia, a country so distant, at that time unconnected, and probably unknown!—Myrzin, another Celtic bard, was a Caledonian.—Aneurin informs us, that in the second battle at Cattereth (about 570 A. D.) Mynnyzwag of Edinburgh commanded the united Britons. No other account mentions the existence of Edinburgh till a century afterwards. Where the ground for suspicion is so advantageous and tenable, no historian, who is anxious for his reputation, or attached to truth, should admit such evidence, however strong a temptation preconceived opinions, or the meagreness of authentic testimony, might present.

We shall now proceed to that part of Mr Turner's history, which is immediately under review. It may be proper to let him describe in his own words, his plan and arrangement.

'On comparing the documents of the nations on the Baltic with our own, the author was struck with the resulting fact, that the great Danish invasion, by which Alfred and his brother were so afflicted, was not a casual depredation, but a deliberate attack to revenge the death of the celebrated Ragnar Lodbrog. This circumstance, which gave system and meaning to what appeared before to be incoherent and unconnected, occasioned further researches: and it at last became apparent, that the inattention of our writers to the northern documents, had filled their histories with obscurity and mistake *. The connexion between our history, and that of the northern nations, was so intimate and incessant, that it appeared impossible to study the English annals, from Egbert to William the Conqueror, with any precision or intelligence, unless the northern literature was consulted and applied.'

(Preface.)

In the second volume, there are some very curious and interesting

* Verstegan, however, had, long before our author, imperfectly discovered the real cause of this Danish invasion. *Restit. Decayed Intel. 173.*

esting chapters. We would particularly recommend those which describe the Sea-Knip, or Vikingr of the North ; the expeditions of Ragnar Lodbrog, and the public and private actions of Alfred, as exhibiting a wide range of research, and containing information that will be attractive to all, and new to most readers. Mr Turner, however, deserves severe reprehension for the vitiated taste, which has led him to conceal and disfigure the interesting simplicity of Affer's narrative, with the cumbrous and tawdry decorations of his own ill-regulated fancy : in some instances, he has evidently disguised or overshadowed the truth, because it opposed his predilection for romance and inflated diction. As Mr Turner has thought proper to enter so fully into the merits of Rudbeck's system, he ought to have made himself acquainted with a very learned and ingenious tract, published by Rudbeck the son. ('*Atlantica Illustrata*', Upsal 1733). The author, imagining that the hundred arguments advanced by his father, in support of the identity of the Atlantis of Plato and Sweden, were defective either in number or power, has brought forward many others, of which we shall notice one, as it supplies a probable etymology of a word, which has exercised the learning and sagacity of Hickes. *Allodial* is derived by Rudbeck from *adel*, *nobilis*, *im munis*; and *lod*, *terra fructus*. After having traced *adel* through almost every known language, and found it in the *ἀλεις πολις* of Aristotle, and in Attalus, Atila, and Atlas; he concludes, 'Ex omnibus itaque vocabulis, jam allatis, primum est concludere nostratem *Atlandiam seu Atlantiam*, per syncopen ex *Ateland* vel *Adeland*, nomen esse fortitam.' Mr Turner asks, does not the word *Bergbuar* (the name of one of the gigantic tribes of *Torsæus*), present us with the origin of our *bug-bear*? We think the etymology from the Welch *bug*, *fear*, much more probable.

The æra and the very existence of Odin, have been the subject of debate and scepticism. Ihre informs us, that some of the Swedish historians record three of that name. The first, who is said to have founded the Scandinavian kingdoms, called Odin the Old (*Odin-hin-gamle*). This he supposes to have been the true God, worshipped under that name. Odin the Second is mentioned only by *Saxo-Grammaticus*, who styles him Mithothys; whence, and from the silence of all other Scandinavian writers respecting him, Ihre suspects that *Saxo* mistook the appellative of *Odin* the Old, *Metod* the creator, for the proper name of a different being. The Icelandic historians fix the third *Odin* in the time of Pompey, from whose arms, they say, he fled into Germany and Sweden *. Rudbeck the son entertains

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* Ihre, in voce *Qdin Suig-Goth.* *Gloss.*

an opinion, in which we believe he is singular, that Odin the Second conducted the Fins and Laplanders; about the time of Salmanassar (before Christ 714), from Media and Persia into Scandinavia †. Mallet supposes, that some man of enterprising genius came from Scythia, and introduced the religion of the God Odin, and that the ignorance of succeeding ages confounded the deity with his priest ‡. Mr Gibbon, in the last volume of his history, takes an opportunity of declaring, ‘ that he has forgotten, or renounced, the flight of Odin from Azoph to Sweden, which he never very seriously believed ||.’ But it was reserved for Mr Pinkerton to discover the grand secret, which he reveals with his accustomed supercilious dogmatism, that Odin never existed §. There is every probability, which we can expect in a subject so remote and obscure, that the Scandinavians originally came from that part of Asia, whence Odin is said to have emigrated ¶. It is also extremely likely, that the leader of this emigration would be honoured as a god, and receive the name, as he had performed the actions of the God of War *. The opinion of Rudbeck, is not only singular, but contradicted by many circumstances. There is no evidence that the Fins or Laplanders came from Asia; the common opinion is more probable, that they were the original inhabitants. Odin is not one of the gods of the Laplanders, who, from their remote and insulated situation, have preserved their ancient religion almost unmixed even with the superstitions which half-converted nations have framed out of Christianity †. The emigration of Odin, must have taken place at a period long anterior to the time

VOL. III. NO. 6.

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† Atlant. Illust. 45.

‡ Mallet, I. 68.

|| Gibbon, XII. 406.

§ Pinkerton's dissert. 181. ‘ O cæcas hominum mentes! Oh pectora cæca! Here is the secret: ODIN NEVER EXISTED. The whole affair is an allegory.’

¶ The flight of Odin is strenuously embraced by Warton, and applied with considerable ingenuity, though with doubtful success, to account for the prevalence of romantic fiction in the ancient Scandinavian nations. Dissert. I. prefixed to Hill, of English Poetry.

* Ihre supposes Odin, or Woden, to be derived from *vedan*, *infanire* Anglo-Sax.; or the Gothic *vods*, *demoniacus*. Keyser informs us, that Odin was called *Wulfader*, the *father of slaughter*; *Waltodur*, the *father of arms*; and *Sigmundur*, the *giver of victory*. Keyser, Antiquit. Septen. 133.

† Leemius de Lappon. chap. 19. 20. 21. 22.; and Erich Joannes Jessen de Finnorum, Lapponumque Norwegicorum, religione pagana. (This Tract is appended to Leems).

of Pompey. In his time, it would have been impossible for the most warlike and powerful army to have pierced through the innumerable nations which lay between the Euxine and Scandinavia. The particular conjecture that they fled from Pompey, is also highly improbable. The Roman general pursued Mithridates to Colchis, but advanced no farther; after continuing there a very short time, he marched into Armenia. We cannot therefore suppose, that an army unseen, and almost unheard of, would have driven Odin and his followers so far from their native country, and into a climate so unsuitable to their habits and feelings.

Mr Turner is inclined to place Odin between 270 and 280 A. D. He finds this opinion on the genealogies in the Saxon Chronicle; where Cerdic, in 495 A. D., is reckoned the ninth descendant from Odin; Ida, in 547, the tenth; and Ella, in 560, the eleventh. From the near coincidence in date of this supposed existence of Odin and the expedition of the Franks from the Euxine Sea, 277 A. D., he thinks it not improbable that Odin was the leader of the Franks in that great expedition. But there are strong objections to this mode of fixing the æra of Odin. The genealogies in the Saxon Chronicle ought not to be trusted: the authors of it make a point of tracing all their distinguished personages to Odin: it is the refuge of ignorance, the fiction of pride, or the policy of superstition and tyranny. Hengist and Horsa, according to them, were the fourth from Odin: if we reckon, with our author, twenty-five years to a generation, there will be exactly a space of a hundred years between these Saxon chiefs and their great progenitor: they lived A. D. 449; he, of course, 349,—seventy years at least before the æra which is indicated by the other genealogies. It is very improbable that the history of one who had lived only a hundred years before, would have become so obscure and mixed with fables, or that he would have been worshipped as their supreme deity. We are as little disposed to coincide with Mr Turner in the opinion that Odin was the leader of the Franks: the Scandinavian nations would not have claimed as their ancestor, or received into the number of their gods, the leader of a foreign band: the Franks, it may also be observed, after having ravaged the coasts of Asia, Greece, and Africa, landed on the Frisian or Batavian shores, where it does not appear that Odin was ever the object of veneration. Our author is mistaken in saying that Gregory of Tours, 573 A. D., is the oldest writer extant who mentions the Danes (II. 54.): they are mentioned by Jornandes 530, and by Procopius 560.

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The three last chapters of the second volume are devoted to the delineation of Alfred's intellectual and moral character, and to the examination of his public conduct. These chapters have rather disappointed us: instead of condensing the scattered traits of our older historians into a distinct and characteristic portrait, Mr Turner enters into a minute and tedious detail, which leaves no distinct and individual impression on the mind. A determination to enlarge his volume, or to display his learning, has led him not only to translate the voyages of Ohthere and Wulfstan, but also to favour his readers with the original Anglo-Saxon. We shall not dispute his ability to translate directly from this language, especially as he informs us that he has collated the text of Mr Barrington's edition with a manuscript, and that his translation differs in some places from that gentleman's; but we may be allowed to smile, when he attempts the conjectural emendation of the Saxon text. The following passage is certainly obscure and perplexing; and we shall not attempt to explain or correct it: 'Thara he ſæde that he ſyxa ſum oſſlode ſyxta on twam dagum.' Mr Turner supposes that *ſyxa* is an error in the MS., and should be *fyxa*, and translates it, 'There he ſaid that, of ſome fish, he flew ſixty in two days.' From this translation, it appears that he considers *fyxa* as the genitive plural: how, then, can *ſum*, which occurs only in the nominative singular, agree with it? If *ſum* be the genuine reading, then *fyxa* must be the nominative singular; in which case, his translation is incorrect, and his proposed reading contrary to ſense and the rules of grammar.*

In the reign of Athelstan was fought the battle of Brunanburgh. It would be difficult to name a battle, during the Saxon heptarchy, which tended so much as this to raise the dignity and strengthen the influence of the English nation among the Continental powers. As its position is not ascertained by Mr Turner, or any other

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writer,

* The context also shews, that Ohthere is speaking exclusively of whales. In his own country, he says, they are taken easily, and in great numbers. As an instance, he adds the sentence which Mr Turner has attempted to correct. In Bussæus's edition of Ohthere, (published along with Arius Frode, Havniæ 1733), which, we believe, is the same as Spelman's, it is rendered, 'Dixit ſe ſextum fuiffe, qui ſexaginta bidui ſpatio interfecerit.' (11.) Adelung, in his Essay on the English Language, translates it, 'Er versicherte, dass er ſelb ſechſte (d. i. mit noch fuinfen) ihrer in zwey Tagen ſechzig erleget habe.' 'He ſaid that he was the ſixth of thoſe (i. e. along with five others) who flew sixty in two days.' But the Anglo-Saxons will not bear either of these translations, especially if *ſum*, which is entirely omitted by Bussæus and Adelung, be a part of the genuine text.

writer, we may be allowed to indulge a little in antiquarian conjecture, not with the expectation of fixing it exactly; but only to shew that the opinions which have been hitherto advanced are all contradicted by undisputed and direct evidence, and to circumscribe the limits within which conjecture must hereafter range, and investigation be directed. Cambden thought it was Ford, near Bromeridge, in Northumberland. Gibson mentions, that in Cheshire there is a place called Brunburgh. Mr Turner has found, in the Villare, Brunton in Northumberland, which he suspects to have been the place. All these conjectures are founded on the supposition that the place still retains some resemblance to its ancient name. Hence, antiquarians have been led astray from the proper object of inquiry. None of these places, however similar in name, can possibly have been the scene of action. They are all at a considerable distance from the sea; whereas, we are told expressly by the Saxon Chronicle, and Florence of Worcester, that the Northmen and Scots fled to their ships.* In the Polychronicon of Ralph of Higden, Anlaf and Constantine are said to have entered the Humber with a fleet; † and Fordun informs us that they invaded the southern parts of the kingdom, and laid waste all the country, till they reached the place where Athelstan was encamped. ‡ If we connect these accounts, we shall be led to conclude that the battle was fought near the Humber, on the Lincolnshire side. Ingulph, indeed, expressly says, that the place was to the north of the Humber, (in Northumbria); but it is by no means probable that the invading armies, after having sailed so far south, would direct their march to the northern and less important part of the kingdom, or that Athelstan would be so imprudent as to leave exposed the southern district, by collecting his force on the north side of the river.

The 3d and 4th chapters of the 2d volume, contain a survey of those states on the Continent with which Athelstan was connected,—Bretagne, France, Germany, Norway, and Normandy. These chapters, particularly the first, which treats of Armorica, the favourite abode, if not the birth-place of Romance, will have the attraction of novelty to most readers; and even those who have perused the several works from which the account is drawn, will

* Gibson's Saxon Chron. 113. Floren. Vignor. Chron. 348.

† Polychron. Ranulph. Higden. 262. apud Gale, I.

‡ Fordun, 672. apud Gale, I.

§ Ingulfi Histor. 37. apud Fell. I. In the Saga of Egill Skallagrimus the battle is said to have been fought at Vigheida: apud Johnston, Celto-Scan. 37.

will acknowledge that Mr Turner has given a connexion and completeness to his narrative, not easily attainable where the materials are so scanty, the details so inaccurate and incomplete, and the authorities, in general, so indirect and suspicious. In one point, however, Mr Turner is certainly mistaken. He affirms, that the people of Vannes in Bretagne conquered the Venetian territory; and he even fixes the date of the conquest A. U. C. 164. We know of no authority for the date; and the truth of the event itself is very suspicious. Polybius says, that the Venetians differed from the other Cisalpine Gauls in their language, and conjectures that they came from Paphlagonia, where, according to Homer, there was a nation called Veneti.* Strabo thinks that the people of Vannes in Bretagne may have given name to the Venetian territory; but, at the same time, expressly says, that he is not confirmed in his opinion; and mentions several other suppositions, all resting merely on a similarity of name.† Cato ascribed a Trojan origin to the Venetians.‡ Cæsar particularly notices the maritime power of the people of Vannes; but he is entirely silent on this point.§ Mr Turner, in making this unfounded assertion, appears to have trusted implicitly to Lobineau; but he ought to have been roused to suspicion, and incited to inquiry, where national partiality, and especially Celtic partiality, was concerned. It is not often, however, that Lobineau is mistaken or partial in his *Histoire de Bretagne*; which Mr Turner has judiciously chosen for his direct and leading authority. There is in that work a more constant and close union of laborious research, luminous arrangement, and discriminating knowledge, than the writings of antiquarians generally exhibit.

Mr Turner proves that tournaments were first regulated, if not invented, by Henry the Fowler; and thus fixes their existence a century before the date assigned them by Du Fresne and St Palaye.|| We know not whether our author be acquainted

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with

* Polybius, II. 48.—Homer's Iliad, B. 852.—Nepos Cornelius, apud Plinii Nat. Hist. VI. c. 2.—Livy, I. c. 1.

† Strabo, IV. 195. V. 212.—Eustathii Scholia in Dionys. Perier. vers. 380.

‡ Cato, apud Plin. III. c. 19. This question is discussed with much learning, but evidently with much partiality, by Lorenzo Pigaoria, Le Origini di Padova, cap. V. p. 30-33.

§ Cæsar, Bell. Gall. III. 50. Edit. Plant.

|| Du Fresne Gloss. Latin. IV. 398.—St Palaye, I. 182.—Tournaments, however, appear to have been familiar in the East, long before they were known in Europe.—Richardson's Dissert. on the Manners, &c. of the Eastern Nations, 198.

with the authority on which Pinkerton traces them to the Moors, in the eighth century; but if he be, we think him justified in rejecting it.* The 'Historia Verdadera' is generally considered by the learned in Spain neither to be ancient, nor to have been written originally in Arabic. There are many internal marks that it is the comparatively modern production of a Spaniard. †

Our author has dispelled the mist of fable which hung round the character of the famous Rollo, by consulting the sober and impartial narrative of Snorro; but he might have rendered his information more authentic and complete, if he had perused the dissertation on Rollo in the 2d volume of Torsæus's History of Norway. The life and character of Dunstan, the tyrannical bigot of Edwin's reign, are introduced by an account of the origin, progress, and institutions of the Benedictine order, into which he entered, and thus sanctified and assisted the projects of his ambition. Our author has derived considerable information from a MS. life of this prelate, preserved in the Cotton Library, written by one apparently his contemporary. In it is the simple and natural truth of that circumstance, which has been converted, by pious fraud, or enthusiastic credulity, into a ridiculous miracle. (135.) The 13th Chapter contains a view of the last state of Northern piracy. In the ninth century, it was an established custom in the North, that all the sons of kings, except the eldest, should be furnished with ships properly equipped, in order to carry on the dangerous, but not dishonourable profession of piracy.

' So reputable was the pursuit, that parents were even anxious to compel their children into the dangerous and malevolent occupation. By an extraordinary enthusiasm for it, they would not suffer their children to inherit the wealth which they had gained by it. It was their practice to command their gold, silver, and other property to be buried with them. Inherited property was despised; that affluence only was esteemed, which danger had endeared.' (II. c. 11.)

When commerce and agriculture became more followed and esteemed, the profession of piracy lost many of its followers, and some of its honour; but the glory which custom had attached to it might still have rendered them powerful, and secured them from destruction, if they had not neglected the disinterested maxims of their ancestors, and regarded their plunder rather as the object of avarice, than the proof of valour. ‡ Mr Turner enters

* Pinkerton's Scottish Poems, II. 439. Note.

† We perceive that Mr Turner, in his first volume, refers to the authority of this supposititious work of Abulcazim.

‡ Piracy seems to have been equally honourable, but not pursued with enthusiasm equally disinterested by many of the ancient maritime nations. Thucyd. I. § 5. and Hudson *in loc.*

enters very fully into the discussion of a much disputed point, —whether Edward the Confessor sent Harold to William of Normandy, in order to appoint him his heir, or whether Harold went on other business, and was himself the legal successor of Edward. Too much stress is laid on the Tapestry of Bayeux. It is certainly a valuable document for the historian, and we are surprised that it should so long have been regarded only as an object of antiquarian curiosity. Its evidence, however, ought to be suspected of partiality. It may be used to illustrate, but it ought not to be allowed to set aside, the testimony of positive and concurring documents.

Every page of Mr Turner's history manifests his extensive research, and minute investigation. It would be difficult to point out many authors that have treated expressly or incidentally on the subject of his work, whom he has not carefully consulted, and accurately quoted.* But he has been more anxious that his authorities should be numerous, than select. His ignorance or his vanity has led him to swell his list with names of doubtful reputation for learning and accuracy. There is very little discrimination displayed. Authors are referred to for important facts, who, from the recentness of the time in which they lived, ought to have been consulted solely for their opinions, not for their testimony. An acquaintance with the Gothic dialects, both ancient and modern, more extensive, and less dependent on the Latin version, than what he seems to have possessed, would have corrected some mistakes, supplied some deficiencies, and procured for his history more confidence and respect.

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We

* We shall mention some works which may be of use to Mr Turner, in correcting mistakes, and supplying deficiencies, if his history should come to a second edition; or which will enable him to illustrate, in his concluding part, the laws, &c. of the Saxons.—H. Meibomii ad Saxonie inferioris in primis historiam introductio, Helmest. 1687, 4to.—This was followed, in 1688, by Meibomii Rerum Germanicarum Scriptores, 3 vol. fol.; the 3d vol. contains the Saxon annals of Witichind, and some curious information respecting the early history of the Saxons.—Ritratti Historici, &c. dell' Casa serenissima di Saffonia, di G. Leti, 4to, 1688.—Pauli Hachenbergi Germania Media, 1676, Heidel, et Edit. 2da, 1687, Amstel. This work contains twelve distinct and elaborate dissertations on the government of the ancient Germans, the distinction of ranks, their laws, their mode of warfare, their marriages, their literature, their language, their religion, their fiefs, their money, their dress and customs, and their funeral rites.—Sprengel's Geschichte von Grossbrittanien.—Schlatzter's Allgemeine nordische Geschichte.—Mæser's Osnabrueckische Geschichte.

We cannot award Mr Turner any higher praise, than that which is due to diligent and careful research. His arrangement is not neat, methodical, or luminous. The narrative is often broken off where it is highly interesting, in order to introduce what might have been either entirely omitted, or deferred without any detriment. Particular care, however, ought to have been taken in the arrangement of a history, which embraces the transactions of a number of states, in order to preserve, at the same time, the connexion of all, and the individuality of each. The work is loaded with reflections, which the author no doubt considered as original, appropriate, and profound : Most readers, we imagine, will pronounce them trite and obvious, and be strongly reminded, by the awkward manner in which they are foisted in, of what used to be the application of a sermon, in days of less taste and more orthodoxy. One specimen shall suffice.

' For seven years, Athelstan, in a cooler moment, mourned the death of Edwin, with a penitence which, from earthly memory, could not obliterate the crime, much less atone for it. Of all human crimes, murder is the most irreparable. The dead never leave their house of gloom. Consciousness, once fled, revisits the mortal tenement no more. He, therefore, who is sent suddenly to his account, with all his imperfections on his head, receives an injury which man cannot compensate. But this is a subject, around which every thing that is awful and mysterious assembles. Fancy must not presume to obtrude ; hope only can be chartered to muse upon it with humble aspiration.' (III. 105.)

Such common-place sentiment, delivered in a style so ludicrously pompous and inflated, would have disgraced even a funeral oration. It is an unequivocal proof of a feeble mind, and a vitiated taste.

Our author is very unfortunate in his attempts to delineate the characters of the Saxon kings. A combination of talents, indeed, that are but seldom to be found united, is requisite to ensure success in this most delicate part of the historian's office. He only who is acquainted with the most secret and delicate springs of human action, whose acuteness and comprehension can detect and combine those qualities which are peculiar and characteristic, can present a strongly marked and highly finished likeness. Mr Turner's attempts possess one recommendation : they will suit equally well for many different personages ; they are portraits to be let.

Mr Turner evidently intends that his style should resemble that of Gibbon. ' Verum facilius Herculi clavum, quam Homero versum surripere.' Not that we are very violently enamoured of the style of Gibbon : it is the style of a mind, more anxious

to dazzle than to enlighten ; which substitutes harshness and inversion for energy ; periphrastic obscurity, for varied elegance ; and which thinks itself profound, when its meaning perplexes or escapes the reader, from the imperfection or ambiguity of the expression : But it is also the style of a mind habituated to reflection ; comprehensive, and often original in its views ; of an imagination luxuriant, not so much perhaps from nature, as from care and cultivation ; and it discovers a command of that language, which is completely unmanageable in the hands of one who has not been so richly gifted by nature, nor so carefully exercised in study. The defects of Mr Gibbon's style are easily copied, and the copy generally surpasses the original. Mr Turner has produced the most highly finished caricature of this style that we have ever seen ; and views, with self-complacency and admiration, what in others would provoke ridicule, or create disgust. Like Mr Gibbon, he ' flings half an image on the straining eye.' He has scarcely started a metaphor, before he deserts it, and pursues another ; and thus, frequently, in one sentence, that imperfection and confusion of imagery are produced, which bewilder the understanding, and offend the taste. The most palpable and peculiar faults in the style of the historian of the Roman Empire, are happily imitated in the following sentences.

' The soldiers of Anlaf fled on every side ; and the death of pursuit filled the plain with bodies.' (III. 34.) ' He was twice a candidate for that endearing felicity, which the connubial union never fails to reciprocate between amiable hearts and well-instructed minds.' (15.) ' He died in 899 ; and his young son, Louis, disappeared from human greatness in 912.' (73.)

These, however, are trivial faults, compared with those which disfigure the greater part of the first volume, and even many passages of the second and third. The well-known line of the poet presents us with so just and striking a character of Mr Turner's general style, that, to save ourselves trouble, and not to afflict our readers with any longer specimens, we shall borrow it to express our opinion,—

' It is not poetry, but prose run mad.'

Even in diction, however, though there is much to blame, there is something to praise. In his description of battles, particularly of those at Brunanburgh (III. 30.), Scearstan (261.), and Af-sandun (264.), he discovers more energy of thought, and a more skilful command of simple but expressive language, than in any other parts of his work : he is particular, without being confused ; and minute, without being tedious : his ideas, on these occasions, appear to have been so rapid and impressive, that they could

could not endure that deliberation, which has evidently rendered his language obscure and inflated in the more elaborate parts of his work.

The grand source of Mr Turner's imperfections, seems to have been his constant and laborious endeavours to imitate Gibbon. He would have succeeded much better, if he had contented himself with the humbler task of collecting and exhibiting, in a plain and unaffected style, the materials of his history. His attempts to unite the accomplishments of a fine writer, with the merits of an accurate compiler, were presumptuous, and have completely failed : they are characters, indeed, which we seldom find united, except in the dubious instance of Gibbon. It, perhaps, is no great disgrace to have failed, where so few have succeeded ; but it certainly would have been more prudent and more honourable, not to have made the attempt. We would advise him not to renew it, where there is still less probability of his success, in his promised review of the learning, laws, manners, government and religion of the Saxons.

ART. XI. *Memoirs of the Life and Writings of the Reverend Alexander Geddes, LL. D.* By John Mason Good. London. Kearsley. 1803. 8vo. pp. 547.

THE name of Dr Geddes is probably known to most of our readers ; and to those who are acquainted with the literary labours of this enterprising and industrious scholar, a biographical sketch must be interesting : yet even his admirers will perhaps agree with us in opinion, that the bulk of the present publication appears to be disproportionate to the necessity, if not to the importance of the occasion. In this prepossession they cannot fail to be confirmed on a more careful examination of the volume, which owes its excessive bulk, not so much to the prolixity or minuteness of the narrative given by Mr Good, as to the introduction of long extracts and analyses of the printed works of Dr Geddes. When the writings of an author have become extremely rare, or from their fugitive nature are likely to become so, a biographical compiler may deserve the thanks of the curious, for this mode of reproduction ; and when these throw any direct or important lights on the history or character of the author, their occasional introduction into the narrative of his life becomes ~~somewhat~~ proper, and may be highly interesting. In the present instance,

stance, no such apology can be pleaded for the compilations of this biographer; for, in general, such of the writings of Dr Geddes as are worthy of preservation, must be easily accessible to those who are desirous of consulting them; and the partial extracts of Mr Good, can scarcely be interesting to any class of readers but such as would prefer their perusal in connexion with the original works from which they are torn. It is far from our meaning to impute to Mr Good any mercenary design of swelling the volume by this easy art of quotation; but we apprehend that, misled by veneration for his learned friend, he has in this respect offended probably against his own better judgement, and certainly against the rules of good taste in biographical writing. In tracing the course of those pursuits which have occupied the life of a literary man, the biographer ought not to obtrude upon us a reperusal of his works. It is his province and his duty to give such a general review as may serve merely to mark the nature and limits of the plans that may have been adopted, and furnish an adequate notion of the mode in which their execution has been accomplished. If he be truly qualified for such a task, he ought to address us in his own person; and the unity of his composition ought not to be broken by quotations, unless when they may happen to be requisite for indicating some delicate peculiarity of manner, which it might be difficult to seize in a general description.

While we feel ourselves strongly called upon to offer this general remark on the execution of the work before us, we are at the same time fully prepared to bestow upon its author, a very considerable share of praise. He was the intimate and confidential friend of Dr Geddes; and though their acquaintance is stated to have commenced at a late period, it appears to have led to an ardent mutual attachment. Although he appears to have been prompted to the undertaking by a dutious regard to the memory of his friend, and a pious and laudable zeal to rescue his name and character from the slanderous insults of bigotry; yet it appears to us, that his ardour, while it has served to stimulate his industry, has not warped his judgement either of the man or the writer, and that it has emboldened him to do ample justice to the virtues and talents of Dr Geddes, without betraying him into any timid and unmanly concealment of his failings. It is by the solid qualities of its matter, that the work before us comes recommended: in the secondary qualities of manner, there is little to entitle it to any distinguished praise. The style is not remarkably deficient in perspicuity or vigour:

it seldom aspires to any of the higher graces of composition; and when it does, the attempt is rarely fortunate. The 'Life of Dr Geddes' will be perused by scholars of the class to which he himself belonged; but it is not one of those happier productions, to which the mere force of writing will give established currency among general readers.

The fame of Dr Geddes rests on his literary talents; and from his earliest years he seems to have been almost exclusively devoted to literary pursuits: yet his history is diversified by a greater variety of changeful occurrences, than is usually to be found in the life of a solitary student. In its earliest period it is interesting, chiefly from the humble and barren prospects by which it was apparently circumscribed. His parents were tenants of a small farm in the county of Banff in Scotland, and were among those who still adhered to the ancient religion of the country. This attachment, however, was probably blended with a larger share of mental freedom than was often to be found among their Roman-Catholic brethren of similar rank; and we may conceive that from them was transmitted to their son, a portion of that ardent activity of mind, and that intrepidity of intellectual character for which he was peculiarly distinguished, and which gave a decided colouring to the complexion of his fortunes. In the scanty library of his native cottage, the most attractive volume was an English translation of the Bible; and to this circumstance, his biographer is inclined to trace the origin of that decided predilection for '*Biblical*' studies which he discovered from the early period of childhood, when he imbibed the first rudiments of learning under the tuition of a country school-mistress.

From the care of this village matron, he passed into that of a private tutor retained in the family of the gentleman on whose estate his father resided: and afterwards he was removed from home to Scalan, a free Roman-Catholic seminary established in a remote and dismal valley of the Highlands of Scotland, and which was limited to boys who had been destined for the Church, and whose studies were to be completed in some foreign university. Few of our readers, we presume, have ever heard of this humble cradle of the sciences; and it probably derives its strongest claim to fame, from having detained young Geddes till his twenty-first year, when he was transferred to the Scottish College at Paris. If his biographer be correct in supposing that the course of classical study pursued at Scalan, did not extend beyond the vulgar Latin version of the Scriptures, it may be regarded as a striking indication of the native and irrepressible vigour,

vigour of his own mind, that he should have emerged from this monkish hovel with so decided a bent towards the pursuit of liberal knowledge as he now discovered. In the most celebrated schools of Paris, a field was opened to him for the gratification of his ruling propensity ; of his opportunities of improvement, he would appear to have fully availed himself ; and, by his proficiency and skill in the performance of his academical exercises, he attracted the applause and the friendship of his masters and literary superiors.

Hitherto, however, his destiny appeared to be limited to the humble station of a Roman-Catholic priest among his native mountains. Such was the professional object, in pursuit of which he returned to Scotland ; and which, after several vicissitudes, was at length attained by his acceptance of the charge of a Catholic congregation in the county of Banff. In his own mind, Dr Geddes had long before projected the arduous undertaking of a new translation of the Hebrew Scriptures from corrected texts of the originals, and had been industriously training himself for its accomplishment ; but, in the seclusion of his present situation, and amidst the various duties which he was called upon to discharge, it appears to have been suspended or abandoned. But even here, the natural activity and genuine benevolence of his mind were not to be repressed ; and while by his virtues he conciliated the love, and commanded the veneration of his flock, he attracted the notice equally of the learned and of the gay, by the extent of his learning and the pleasing vivacity of his manners.

Here, however, he might have long remained, but for misfortunes, which he may be said to have brought upon himself by an imprudent indulgence in the exercise of those virtues which elevated his character above the level of those around him, and gave him the most honourable claim to their support ; but which, in the end, were so far fortunate in their operation, by compelling him to quit his retirement, and to return once more into that literary career for which he was naturally destined. Without repeating the particulars given by his biographer, it may be enough here to state, that having injured his private fortune by acts of disinterested beneficence, and having in vain attempted to retrieve the injury by the labours of agriculture, he felt himself strongly impelled, by the pressure of pecuniary difficulties, to avail himself of the literary talents which he must have been conscious of possessing.

Another cause, still more irresistible, operated likewise in the same direction. Dr Geddes was endowed by nature with a mind

mind of uncommon ardour and activity; and having early committed himself to the free and undaunted exercise of his own understanding, he had emancipated himself from the illiberal prejudices of theological bigotry, and, by the vigour of his constitution, had repelled the infection of those vices which have been thought too apt to taint the priestly character. Instead of flattering and cherishing the baneful animosities which had long set his brethren at variance with those who had revolted from the Romish Church, he laboured with unwearied assiduity, and with the most pleasing success, in softening their reciprocal asperities, and in training them to habits of mutual charity and forbearance. In his own conduct, he gave an unlimited range to this liberal and comprehensive benevolence. He lived in undisguised intercourse and friendship with the Protestant clergymen in his neighbourhood; and he had even the hardiness to think, that, without being polluted, he might listen to the instructions delivered from a Protestant pulpit. This unprecedented disregard of the maxims of that malignant and dubious policy, by which the brethren of his order had hitherto been guided, appears to have given alarm and mortal offence to his ecclesiastical superiors; and, finding that he was not of a character to be intimidated by threats from obeying the dictates of his own mind, it was, in their wisdom, judged expedient, by a formal sentence, to separate him for ever from a flock in whom his virtues had created a dangerous and seducing attachment.

This event might be considered as fortunate for his fame, if not for his private happiness, by fixing, or at least accelerating, his resolution of quitting his retirement for a situation better suited to the prosecution of those literary schemes which had awakened his early ambition. His translation of Select Satires of Horace, though more remarkable for spirit than elegance, had already obtained a reception from the public which tended to inspire him with greater confidence in his own powers; and even the very moderate profits of the publication, under the pressure of pecuniary difficulties, operated as an additional incentive to the execution of more arduous undertakings. He now fixed his ordinary residence in London; was invited to officiate as priest in the chapel of the Imperial Ambassador; and resumed his favourite project of a new translation of the Bible. This, however, was a work of perilous adventure and doubtful issue, and would have been probably abandoned for easier and more profitable labours, had not the utmost exertions of its author been called forth by the animating and steady patronage of the late

late Lord Petre. It was to the ‘ princely munificence’ of this nobleman that Dr Geddes became indebted for the leisure which was to enable him to prosecute his plan ; and it may be regarded as honourable alike to both, that such weighty obligations could be borne without galling a mind jealous of its own independence, and without disturbing the course of an equal and ardent friendship.

For several succeeding years, Dr Geddes seems to have devoted nearly the whole of his attention to the different critical labours preparatory to his great work ; and in perusing the minute narrative of Mr Good, it is impossible not to regret, that the versatility of his genius, or the ardour of his disposition, should have ever diverted him from the exclusive prosecution of a plan, which it would have demanded the undivided exertions of a long life to bring to a successful completion. His capacity of intense application to literary labour seemed, on the one hand, to promise the most prosperous issue to the undertaking to which he had thus destined himself ; but in this undertaking he was never so completely absorbed, as to become a careless spectator of what was passing around him in the world ; and a natural vehemence of temper, which seems, by indulgence, as much as from the influence of external circumstances, to have grown into a habit of violent irritability, was too often prompting him to take a share in discussions of merely temporary interest. As a polemical writer, particularly on those questions which related to the political privileges or ecclesiastical jurisdiction of the English Catholics, he was unable to restrain from mingling in the din and danger of the contest. As the champion of his party, he distinguished himself equally by his acuteness and intrepidity ; and had the honour of being marked out as the object of peculiar terror and aversion to those of his own persuasion whose prejudices or whose pride were offended by the boldness of his speculations, or the firm independence of his conduct. In this part of his narrative, the details given by Mr Good are ample to excess ; yet they are not altogether incurious, as exhibiting the feeble, expiring convulsions of that gigantic hierarchy, which once exercised an uncontroled domination over all Christendom, and which three centuries of rapid decline have not yet brought to a final termination.

Besides these more serious deviations from the course of his favourite pursuit, Dr Geddes seems to have been incapable of restraining from lighter excursions into the fields of fancy and of wit : and from time to time he attracted a share of public notice as a writer of humorous and macaronic verses. These must

must be regarded merely as the relaxations of an active mind; but they do not appear to us to be of that happy sort which can survive the fleeting interest of the topics to which they relate. Some of the best of his Latin verses are those which celebrate the French Revolution. It was scarcely possible that a mind, formed like that of Dr Geddes, should not have been seduced into admiration of an event which, at least when beheld at a distance, appeared to open with the most splendid prospects of national felicity; and while it yet remained possible to mistake the evils which it engendered, for inconveniences of only secondary importance, it is not much to be wondered at that he should have clung with fondness to his first visionary prepossessions. It is more to be regretted that his native benevolence does not seem to have completely protected him from a slight taint of that ferocity of temper which is but too apt to take possession of those whose minds are agitated by events which involve so deeply the future fortunes of mankind.

Although the details given by Mr Good relative to the controversial as well as poetical writings of Dr Geddes, occupy a considerable portion of this bulky volume, yet they are by no means the most important or interesting part of his literary life. We have already expressed our regret that these inferior and temporary pursuits should have diverted so much of his attention from an object to which he ought to have been solely devoted. The evil, however, consisted not so much in the mere waste of time or of labour, as in the increase of that distempered irritability of mind which his controversial warfare produced, and which not only tended to unfit him for the calmer business of philology, but indirectly created additional obstacles to the success of an undertaking, in its own nature abundantly perilous.

To those who have remarked the progress of critical learning in modern Europe, it must be obvious, that in its application to those writings which are accounted sacred, and which are appealed to as the standards of religious belief, its advances have been comparatively slow. At a period when the learning and ingenuity of scholars were zealously employed in the restoration of the profane writings of Greece and Rome, from that degraded state of corruption into which they had fallen in the dark ages, the Christian divine seems to have acted on the supposition that the sacred scriptures were, by a perpetual miracle, exempted from those contingencies which naturally accompany the successive transcriptions of the same work; nor did his veneration for the text ever suffer him to approach it, unless, perhaps, when some

some laudable object was to be gained by the substitution of a more commodious reading. It may be regarded as a discovery of recent date, and which has been occasioned by the perverse labours of modern collators, that the originals of the Jewish and Christian Scriptures, are no longer to be met with in a state of absolute purity; that, in the lapse of ages, they have sustained the same injuries from the ignorance, inattention, or infidelity of transcribers, which it is the object of profane criticism to redress; and that precisely the same rules and methods of correction must be applied to every written composition in the language of men, from whatever source it may have been derived. Yet, while all this is now generally admitted in theory, it seems still to be with trembling reluctance that the greater number of Christians allow their Bibles to be subjected to the tinkering operations of collators and emendatory critics; and it may probably be long before the labours of the Biblical philologist are suffered to proceed unimpeded by those peculiar and extraneous difficulties which the interests and the passions of men are so apt to create in this department of literature.

Although several English divines of great eminence had made partial inroads into this province, yet Dr Geddes was the first who, unappalled by the natural or adventitious difficulties of the task, concived the design of giving to his countrymen a version of the Old and New Testaments, in which he should avail himself of all those additional lights which modern criticism had thrown on the state of the Hebrew and Greek originals.

It was not till the year 1786, that Dr Geddes, at the age of fifty, had advanced so far in his arduous course of preparatory study, as to come forward with a prospectus of his intended work. This prospectus, which is itself a considerable volume, exhibited a very elaborate and learned account of the progress of Biblical philology, and a very formidable display of the defects of his predecessors, which it was his object to supply. After giving an analysis of this publication, for the minuteness of which he offers some apology, Mr Good observes that its favourable reception, and the compliments paid him on a perusal of it by many scholars of the first eminence and erudition, were regarded by the author as an omen of his future success, and served to stimulate him, in a tenfold degree, to perseverance in his labours. Several other smaller publications also preceded the appearance of the principal work, in which Dr Geddes took occasion either to state the difficulties in the execution of a vernacular version which it was his aim to overcome, or

to solve the doubts and repel the hostile attacks of a host of correspondents.

At length, in the year 1792, he gave to the world the first volume of a new translation of "the books accounted Sacred by Jews and Christians, otherwise called the Books of the Old and New Covenants, from corrected texts of the originals, with various readings, explanatory notes, and critical remarks." After an interval of five years, he published, in 1797, a second volume of the translation, and, in 1800, there appeared a volume of Critical Remarks, corresponding to the first of the translation. Had the hopes and designs of this laborious scholar been accomplished, the whole work would have been extended to, at least, eight large volumes in quarto. But this happy termination of his labours, he was destined never to reach; and he died on the 2d of February 1802, while his version of the Psalms of David was passing through the press.

In estimating the merits of Dr Geddes as a translator and critic, we shall not presume to hazard any opinion of our own, upon a subject which necessarily demands a profound acquaintance with those studies to which his life was devoted. In so far as a mere English reader can pretend to judge, we should have no hesitation in saying, that in the modernized phraseology of Dr Geddes, the writings of Moses lose much of that venerable dignity and grace which they exhibit in the more antiquated garb of our established translation; and that, where the meaning of the original had not been mistaken, we should infinitely have preferred the idiomatical irregularities of Wickliff and Tyndal, and King James's translators, to the smartness and grammatical methodism of Dr Geddes, degraded as they certainly are in many instances by the opposite vices of scholastic pedantry, and colloquial vulgarity.

In whatever regards the more substantial qualities of the work, it seems impossible to doubt that Dr Geddes is justly entitled to a large share of praise. On this head, Mr Good appears to speak with great liberality and candour. After giving ample specimens of the translation, and questioning the critical opinions of his learned friend in various instances, he observes, that,

"In his translation, our author has uniformly confined himself to the duties of a faithful interpreter. In a few doubtful passages he may perhaps have overstepped the modesty of his office: but, in general, his corrections are well supported by original argument, by criticisms of prior commentators, or the common consent of approved readings. His style is, in the most part plain and perspicuous, conveying the sense of the original in its native simplicity. But his language is occasionally unequal, and strongly partakes of the alternations of his own physical constitution."

constitution; in consequence of which, in the visit of a passage, most exquisitely rendered in the main, we are at times surprised with schoolish and extraneous expressions, or disgusted with insatiable vulgarity. It should never be forgotten, however, that the whole is the work of an individual unassisted by fellow-labourers, and that it constitutes his first attempt. Had he lived to have realized his own wishes, and to have revised it by a second edition, published in twelve volumes without his Critical Remarks, there would have been little room for many of the observations which the cause of truth has thus compelled me to hazard. As it is, it offers, so far as it proceeds, the most intelligible version of the sacred records in the English, or perhaps in any language whatever; and there are few obscure passages in our established translation which this version will not illuminate.

' But though in his interpretation he faithfully restricted himself to the duties of a translator, in his volume of Critical Remarks our author conceived himself at liberty to throw off every restriction whatever; and this part of his labours has, in consequence, been open to much severity of attack, and the source of no small degree of undeserved opprobrium.' p. 358. 359.

Most of our readers are probably acquainted with the general nature and tendency of those peculiar opinions to which Mr Good here adheres. When we consider the formidable obstacles which naturally presented themselves to the prosperous issue of his undertaking as a mere translator of the Sacred Writings, and to surmount which might have been sufficient triumph for any unassisted individual, it must be matter of regret that Dr Geddes should have embarrassed his own progress, and in a great measure defeated his own laudable exertions, by rushing impetuously into those general controversies which are beyond the province of the mere philologist, and which regard not the sense, but the authority and divine original of these ancient compositions. But on those momentous topics Dr Geddes had formed very decided opinions, derived from what he conceived to be a deliberate and extensive consideration of contending arguments; and being of a disposition too open and intrepid to disguise or suppress his sentiments, even at the peril of martyrdom, he was prompted in an evil hour for his own repose, to stand forth as the avowed antagonist of the supernatural mission of the Jewish Lawgiver, and of the divine inspiration of those books which have descended to us as his compositions. On these subjects, Mr Good has declared his own opinions to be in decided opposition to those of Dr Geddes; at the same time, with becoming regard to the memory of his excellent friend, he firmly upholds his claim to rectitude of intention, and repels, with honest indignation, the accusations of those who would refuse to him the name of Christian, and who sneer piously to despise their own inability to refute him even in the fictions of *me ans de fer*.

We must refer our readers to the narrative of Mr Good for a detail of those irritating controversies and hostilities which but too much embittered the remaining days, and probably abridged the life of this bold and indefatigable scholar. It was from the divines of his own Church that he experienced the hardest and most intolerant treatment; and as he had originally taken his ground with almost unexampled hardihood in a Christian divine, even his enemies must admit that he continued to maintain it without flinching, and without suffering the slightest encroachment on the dignity of an independent and upright mind. In open and manly warfare, the contest would have served only to invigorate his spirits and his powers; but the insidious arts, and undermining, persecuting policy of cowardly and bigoted adversaries, were more than a temper of so much natural irritability could long sustain. Neither the unbending firmness of his character, nor the consolations of tried friendship, nor the relaxations of a mind playful and innocent to an uncommon degree, could save his spirits and his health from sinking under his unfinished task. Even the grave scarcely afforded him an asylum from the attacks of his calumniators: the paltry hackneyed lie of a '*deathbed recantation, studiously concealed,*' was impudently resorted to as the last effort of polemical cowardice: and our readers will perhaps smile to hear, that, as the last ebullition of polemical rage, the ceremony of saying public mass for the deceased was prohibited by an express interdict of the vicar apostolic.

Mr Good concludes his narrative with a general sketch of the character of his deceased friend. A part of it may here be subjoined, as affording a specimen of the execution of the work before us; from which, without further commentary, we shall leave it to our readers to judge how far the general remarks we have already hazarded be well or ill founded.

Such, as far as I have been able to collect it, is the history of the late Dr Geddes; a man of no common character, and whose energy of mind, and activity of body, seemed engaged in a perpetual contest for the mastery. In his corporeal make he was slender, and in the bold and formidable outlines of his countenance not highly prepossessing on a first interview: but never was there a face or a form through which the soul developed itself more completely than through his own. Every feature, and indeed every limb, was in harmony with the entire system, and displayed the restless and indefatigable operations of the interior of the machine. A play of cheerfulness beamed uniformly from his cheeks, and his animated eyes rather darted than looked benevolence. Yet such was the irritability of his nerves, that a slight degree of opposition to his opinions, and especially when advanced by persons whose mental powers did not warrant such opposition, put to flight in a moment the natural character of his countenance, and cheerfulness and benevolence were

were exchanged for exacerbation and tumult. Of his physical and irresistible impulse in his constitution, no man was more thoroughly sensible than himself; and if no man ever less succeeded in subduing it, no man ever took more pains to obtain a victory. Let us, however, fairly strike the balance, and we shall find, that if such a peculiar construction of body had its evil, it also had its advantage; and that the very irritability of soul which occasionally hurried him, against his consent, into a violence of controversy not perfectly consonant with the polished manners of the day, hurried him a thousand times oftener, and with a thousand times more rapidity, because assisted instead of opposed by his judgement, into acts of kindness and benevolence. The moment he beheld the possibility of doing good by his own exertions, the good was instantly done, although it were to a man who, perhaps, had causelessly quarrelled with him a few hours before. It was not in his nature to pause, with our academic and cold-blooded philosophers of the present day, that he might first weigh the precise demand of moral or political justice, and inquire into the advantage that would accrue to himself, or in what manner the world at large might be benefited either by a good action or a good example: it was stimulus enough for him that distress existed, and that he knew it—and it afterwards afforded him satisfaction enough that he had removed or mitigated it.

In intellectual talents he had few equals, and fewer still who had improved the possession of equal talents in an equal degree. To an ardent thirst after knowledge, in all its multitudinous ramifications, he added an astonishing facility in acquiring and retaining it; and so extensive was his erudition, that it was difficult to start a subject into which he could not enter, and be heard with both attention and profit. But theology was the prime object of his pursuits, the darling science of his heart, which he had indefatigably studied from his infancy, and to which every other acquisition was made to bend. From his verbal knowledge of the Bible, he might have been regarded as a living concordance; and this not with respect to any individual language alone, or the various and rival renderings of any individual language, but a concordance that should comprise the best exemplars of the most celebrated tongues into which the Bible has ever been translated. As an interpreter of it, he was strictly faithful and honest to the meaning, or what he apprehended to be the meaning, of his original; and though, in his critical remarks upon the text, he allowed himself a latitude and a boldness which injured his popularity, and drew down upon his head a torrent of abusive appellations, how seldom have we seen a man, systematically educated in the characteristic tenets of any established community whatsoever, and especially of the church of Rome, who, when he has once begun to feel his independence, and has determined to shake off his fetters, and to think for himself, has not flown much further from the goal at which he started! p. 529—534.

To an universal knowledge of the Bible, Dr Geddes added a deep and elaborate acquaintance with the history of his own Church; and so thoroughly was he versed in its annals, in its jurisprudence, in its pole-

onica, that I have good authority for asserting, that even at the Vatican it was doubted whether the papal dominions themselves could produce his superior.

His classical attainments, if not of the first rate, were of a very distinguished character; and when, in his own language, he wrote with coolness and circumspection, his diction, which was always perspicuous, was peculiarly elegant and correct. His style is nevertheless extremely variable: he often composed precipitately, and occasionally in a state of high mental irritation: and though there be a character which still adheres to what he wrote, and fully deciphers the writer, his compositions uniformly partake of the predominant sensation of the moment. In few words, he was a benevolent man, an accomplished scholar, an indefatigable friend, and a sincere Christian.' 536. 537.

ART. XII. Des Pierres tombées du Ciel, ou Lithologie Atmosphérique, &c. &c. Par Joseph Izarn, Professeur de Physique, &c. Paris, De la Lain, fils. An XI. (1803.) pp. 427, 8vo.

THIS work is a collection of all the facts and opinions which have of late years been given to the world with respect to the very singular phenomenon mentioned in the title. M. Izarn's share of merit in the compilation is extremely small. He has only transcribed the statements of others upon the subject, from their own words, when they happened to write in French, and from French translations, when the original was either English or German. He has here and there added a few remarks, of little value; and has given, at the end, a theory of his own, detailed with great prolixity, and fatiguing affectation of accuracy, put in itself by far the most unsatisfactory of any that has been offered, to explain the difficulties of the question. As the labours of chemical inquirers have now greatly augmented the many wonders of this subject, and brought within the range of philosophical discussion, ideas which, a few years ago, were left to the credulous fancy of the vulgar, we shall take the liberty of presenting to our readers a connected view of the evidence which has been procured upon this very singular branch of natural history, and a statement of the comparative difficulties which encumber the different theories founded upon that evidence. We wish to be understood as offering this sketch as a substitute for M. Izarn's work; because we conceive, that something more was required of him, than a mere transcript of the documents which contain the facts of the case.

The histories of all nations, in early times, abound with fabulous accounts of natural phenomena. Showers of blood and of rain; battles of armed men in the air; animals of different descriptions

scriptions uttering articulate sounds, are a few of the tales which we meet with in the annals of ancient Rome : and the lively imagination of Oriental countries has infinitely varied this catalogue of wonders. Of such incidents, however, it has frequently been found possible to give some explanation consistent with the ordinary laws of nature, after the narratives have been freed from the fictions with which superstition or design had at first mingled them. But it is singular with what uniformity the notion of showers of stones has prevailed in various countries, at almost every period of society ; with how few additions from fancy the story has been propagated ; and how vain all attempts have proved, to account, by natural causes, for the phenomenon, with whatever modifications it may be credited. Accordingly, philosophers have rejected the fact, and either denied that stones did fall, or affirmed, at least, that if they fell on one part of the earth, they were previously elevated from another. The vulgar have as steadfastly believed, that they came from beyond the planet on which we live ; and every day's experience seems now to increase the probability, that in this instance, as in some others, credulity has been more philosophical than scepticism.

There are two methods of inquiring into the origin of those insulated masses which are said to have fallen in different parts of the earth. We may either collect, as accurately as possible, the external evidence, the testimonies of those persons in whose neighbourhood the bodies are situated ; or we may examine the nature of the substances themselves, and compare them with the kinds of matter by which they are surrounded. The first mode of investigation is evidently more liable to error, and less likely to proceed upon full and satisfactory *data* than the other. But if both inquiries lead to conclusions somewhat analogous ; if both the inductions of fact present us with anomalous phenomena of nearly the same description, and equally irreducible to any of the classes into which all other facts have been arranged, we may rest assured that a discovery has been made—and the two methods of demonstration will be reciprocally confirmed.

I. The first narrative which has been offered to the world, under circumstances of tolerable accuracy, is that of the celebrated Gassendi. He was himself the eye-witness of what he relates. On the 27th of November, in the year 1627, the sky being quite clear, he saw a burning stone fall on mount Vaifir, between the towns of Guillaumes and Perne in Provence. It appeared to be about four feet in diameter, was surrounded by a luminous circle of colours like a rainbow, and its fall was accompanied with a noise like the discharge of cannon. But Gassendi inspected the supposed fallen stone still more neatly ; he found that it weighed 59 lib., was ex-

tremely hard, of a dull metallic colour, and of a specific gravity considerably greater than that of common marble. Having only this solitary instance to examine, he concluded, not unnaturally, that the mass came from some neighbouring mountain, which had been in a transient state of volcanic eruption.

The celebrated stone of Ensisheim is not proved to have fallen, by testimony quite so satisfactory; but there are several circumstances narrated with respect to it, which the foregoing account of Gassendi wants. Contemporary writers all agree in stating the general belief of the neighbourhood, that on the 7th of November 1492, between eleven and twelve o'clock a. m. a dreadful thunder-clap was heard at Ensisheim, and that a child saw a huge stone fall on a field sowed with wheat. It had entered the earth to the depth of three feet; it was then removed, found to weigh 260 lib., and exposed to public view. The defect in Gassendi's relation is here supplied; for we have the nature of the ground distinctly described: the natives of the place must have known that in their wheat field no such stone had formerly existed: but the evidence of its having actually been observed to fall, is by no means so decisive as that of Gassendi.

Other recitals have been given of similar appearances, but by no means so well authenticated, or so fully examined, although somewhat nearer our own times. In 1672, one of the members of the Abbé Bourdin's academy presented at one of the meetings, a specimen of two stones which had lately fallen near Verona; the one weighed 300, the other 200 lib. The phenomenon, he stated, had been seen by three or four hundred persons. The stones fell in a sloping direction, during the night, and in calm weather. They appeared to burn, fell with a great noise, and ploughed up the ground. They were afterwards taken from thence, and sent to Verona. This account, it may be observed, was published in the same year. Paul Lucas the traveller relates, that when he was at Larissa in 1706, a stone of 72 lib. weight fell in the neighbourhood. It was observed, he says, to come from the north, with a loud hissing noise, and seemed to be enveloped in a small cloud, which exploded when the stone fell. It smelt of sulphur, and looked like iron dross.

M. De la Lande, in 1756, published an account of a phenomenon very nearly resembling the above, but deficient in several points of direct evidence. His narrative, however, deserves our attention, because he seems to have been upon the spot, and to have examined, with great care, the truth of the circumstances which he describes. In September 1753, during an extremely clear and hot day, a noise was heard in the neighbourhood

neighbourhood of Pont-de-Vesle, resembling the discharge of artillery. It was so loud as to reach several leagues in all directions. At Liponas, three leagues from Pont-de-Vesle, a hissing sound was remarked; and at this place, as well as at Pont-de-Vesle, a blackish mass was found to have fallen in ploughed ground, with such a force as to penetrate half a foot into the soil. The largest of these bodies weighed 20 lib.; and they both alike appeared, on the surface, as if they had been exposed to a violent degree of heat. It may here be observed, that the small depth at which these bodies were found in the ploughed land, renders it in the highest degree improbable that they should have existed there previously to the time of the explosion. To the same purpose, we may remark the complete resemblance of the two masses found at so great a distance from each other.

In the year 1768, no less than three stones were presented to the Academy of Sciences at Paris, all of which were said to have fallen in different parts of France; one in the Maine, another in Artois, and the third in the Cotentin. These were all externally of the very same appearance; and Messrs Fougéraux, Cadet, and Lavoisier drew up a particular report upon the first of them. They state, that on the 18th of September 1768, between four and five o'clock in the evening, there was seen near the village of Lucé, a cloud in which a short explosion took place, followed by a hissing noise, without any flame; that some persons about three leagues from Lucé, heard the same sound, and, looking upwards, perceived an opaque body which was describing a curve line in the air, and was about to fall upon a piece of green turf in the neighbouring high road; that they immediately ran to this place, and found a kind of stone, half buried in the earth, extremely hot, and about $7\frac{1}{2}$ lib. weight. This account of the fact was communicated to the academicians by the Abbé Bachelay. But they do not appear to have attached much credit to the whole circumstances of his narrative; for they conclude (chiefly from several experiments made to analyse it) that the stone did not fall upon the earth, but was there before the thunder-clap, and was only heated and exposed to view by the stroke of the electric fluid.

Of late years, the attention of philosophers has been more anxiously directed to this curious subject; and more accurate accounts of the supposed fall of stones have been collected from various quarters. It is not a little singular, that the narrative which, of all others, was supported by the very best and most direct evidence, was treated by naturalists near the spot, with perverse incredulity, until the results of chemical analysis, about ten years after the thing happened, began to operate some change

change upon the common opinions relating to such matters. We allude to the shower of stones, which fell near Agen, 24th July 1790, between nine and ten o'clock at night. First, a bright ball of fire was seen traversing the atmosphere with great rapidity, and leaving behind it a train of light which lasted about fifty seconds; a loud explosion was then heard, accompanied with sparks which flew off in all directions. This was followed, after a short interval, by a fall of stones, over a considerable extent of ground, at various distances from each other, and of different sizes; the greater number weighing about half a quarter of a pound, but many a vast deal more. Some fell with a hissing noise, and entered the ground: others (probably the smaller ones) fell without any sound, and remained on the surface. In appearance, they were all alike. The shower did no considerable damage; but it broke the tiles of some houses. All this was attested in a *procès-verbal*, signed by the magistrates of the municipality. It was farther substantiated by the testimony of above three hundred persons, inhabitants of the district; and various men, of more than ordinary information, gave the very same account to their scientific correspondents. One of these (M. D'Arcet, son of the celebrated chemist of that name) mentions two additional circumstances, of great importance, from his own observation. The stones, when they fell upon the houses, had not the sound of hard and compact substances, but of matter in a soft, half-melted state; and such of them as fell upon straws, adhered to them, so as not to be easily separated. It is utterly impossible to reconcile these facts with any other supposition, than that of the stones having fallen from the air, and in a state of fusion. That they broke the roofs of houses, and were found above pieces of straw adhering to them, is the clearest of all proofs of their having fallen from above.

Although nothing can be more pointed and specific than this evidence, it yet derives great confirmation from the similar accounts which have still more recently been communicated. On the 18th December 1795, the weather being cloudy, several persons in the neighbourhood of Captain Topham's house, in Yorkshire, heard a loud noise in the air, followed by a hissing sound, and afterwards felt a shock, as if a heavy body had fallen to the ground at a little distance from them. One of these, a ploughman, saw a huge stone falling towards the earth, eight or nine yards from the place where he stood. It was seven or eight yards from the ground when he first observed it. It threw up the mould on every side, and buried itself twenty-one inches. This man, assisted by others who were near the spot at the same time, immediately raised the stone, and found that it weighed about

56 lib. These statements have been authenticated by the signatures of the people who made them.

On the 17th March 1798, a body, burning very brightly, passed over the vicinity of Ville-Franche, on the Saone, accompanied with a hissing noise, and leaving a luminous track behind it. It exploded with great noise, about twelve hundred feet from the ground; and one of the shivers, still luminous, being observed to fall in a neighbouring vineyard, was traced. At that spot, a stone above a foot in diameter was found to have penetrated about twenty inches into the soil. It was sent to M. Sage, of the National Institute, accompanied by a narrative of the foregoing circumstances, under the hand of an intelligent eye-witness.

While these observations in Europe were daily confirming the original but long exploded idea of the vulgar, that many of the luminous meteors observed in our horizon are masses of ignited matter, an account of a phenomenon, precisely of the same description, was received from the East Indies, vouched by authority peculiarly well adapted to secure general respect. Mr Williams, a member of the Royal Society of London, residing in Bengal, having heard of an explosion, accompanied by a descent of stones, in the province of Bahar, made all possible inquiries into the circumstances of the phenomenon, among the Europeans who happened to be on the spot. He learnt, that on the 19th December 1798, at 8 o'clock P. M., a luminous meteor, like a large ball of fire, was seen at Benares, and in different parts of the country; that it was attended with a rumbling, loud noise; and that, about the same time, the inhabitants of Krakhut, fourteen miles from Benares, saw the light, heard a loud thunder-clap, and, immediately after, heard the noise of heavy bodies falling in their neighbourhood. Next mornings the fields were found to have been turned up in different spots, which was easily perceived, as the crop was not more than two or three inches above the ground: and stones of different sizes, but apparently of the same substance, were picked out of the moist soil, generally from a depth of six inches. As the occurrence took place in the night, and after the people had retired to rest, no one observed the meteor explode, or the stones fall; but the watchman of an English gentleman who lived near Krakhut, brought him one next morning, which he said had fallen through the top of his hut, and buried itself in the earthen floor.

Several of the foregoing narratives mention the material circumstance, of damage done to interposed objects by the stones supposed to have fallen on the earth. In one instance, still more distinct,

distinct traces were left of their progress through the air. During the explosion of a meteor, on the 20th August 1789, near Bordeaux, a stone, about fifteen inches diameter, broke through the roof a cottage, and killed a herdsman and some cattle. Part of the stone is now in the museum of Mr Greville, and the rest in that of Bordeaux. It is singular that this fact is not mentioned by M. Izarn, nor by Vauquelin, although he examined a specimen evidently taken from the same stone, and received a *procès-verbal* of the manner in which it fell. We take the account from Mr Greville's paper, (Phil. Trans. 1803. part I.); and he appears to have received it from M. St Amand, Professor of Natural History at the Central School of Agen.

It is quite impossible, we apprehend, to deny very great weight to all these testimonies; some of them given by intelligent eye-witnesses; others by people of less information, indeed, but prepossessed with no theory; all concurring in their descriptions; and examined by various persons of acuteness and respectability, immediately after the phenomena had been exhibited. Without offering any farther remarks, then, upon this mass of external evidence, we shall only remind our readers of the main points which it seems satisfactorily to substantiate. It proves, that, in various parts of the world, luminous meteors have been seen moving through the air, in a direction more or less oblique, accompanied by a noise, generally like the hissing of large shot, followed by explosion, and the fall of hard, stony, or semi-metallic masses, in a heated state. The hissing sound, so universally mentioned; the fact of stones being found, unlike all those in the neighbourhood, at the spots towards which the luminous body or its fragments were seen to move; the scattering or ploughing up of the soil at those spots, always in proportion to the size of the stones; the concussion of the neighbouring ground at the time; and, above all, the impinging of the stones upon bodies somewhat removed from the earth, or lying loose upon its surface—are circumstances perfectly well authenticated in these reports; and, when taken together, are obviously fatal to any theory, either of the masses having previously existed in the soil ready formed, and having been disclosed by the electric fluid—or of their component parts having existed there, and having been united and consolidated by that fluid.

II. While the internal evidence on this question, that is, the inference arising from an examination of the stones themselves, agrees most harmoniously with the conclusion to which the narratives above analyzed force our assent, and greatly strengthens that conclusion, it also leads to a farther knowledge of the subject,

jeet, than the mere external evidence could of itself have afforded us.

The reports from all those who observed the meteors, and found the stones in the neighbourhood, after the explosions, agree in describing those substances as different from all the surrounding bodies, and as presenting, in every case, the same external appearance of semi-metallic matter, coated on the outside with a thin black crust, and bearing strong marks of recent fusion. This general resemblance we should be perfectly entitled to infer from the various accounts of eye-witnesses, even if no more particular observations had been made by men of science, to whose inspection many of the fallen bodies were submitted. But fortunately a considerable number of these singular substances have been examined, with the greatest care, by the first chemists and naturalists of the age; and their investigations have put us in possession of a mass of information, capable of convincing the most scrupulous inquirer, that the bodies in question have a common origin, and that we are as yet wholly unacquainted with any natural process which could have formed them on our globe.

M. De la Lande appears to have examined the stones which fell near Bourg, in the province of Bresse, 1753, with some attention. He remarks their external coating of black vitrified matter, the metallic or pyritical threads interspersed through them, and more particularly the cracks filled with metallic particles. His chemical analysis is very meagre and unsatisfactory; but such as it was, its results, as well as the general observations of external character, corresponded with the inferences drawn by him from a similar examination of the stone which fell, in 1750, near Coutances, in Normandy, at the distance of three hundred and sixty miles from Bourg.

The external appearance of the three stones presented to the Academy of Sciences, as having fallen in different parts of France during the year 1768, was precisely the same. But M^{rs}s Lavoisier, &c. the committee appointed to examine them, performed the chemical analysis with much greater accuracy and fulness than M. De la Lande had done. That which fell in the Maine, and was presented by the Abbe Bachelay, underwent the most careful process. It was found to contain, of sulphur, $\frac{1}{2}$ per cent.; iron, 36; and vitrifiable earth, 55 $\frac{1}{2}$. It must be remarked, however, that this decomposition was effected by means of experiments performed upon an integral part of the whole stone, considered as a homogeneous substance; whereas, it is in fact a congeries of substances, which ought to have been separately analyzed. This consideration will, in part at least, enable

enable us to account for the apparent discrepancy between the results obtained by the academicians and those of later experimentalists. Messrs Lavoisier, &c. also examined particularly another stone, said to have fallen in a different part of France, and obtained very nearly the same results. The only difference was, that it did not give out sulphurated hydrogenous gas when acted upon by the muriatic acid; a peculiarity distinctly observable in the other substance.

The description which Professor Barthold gives of the external character of the stone which fell near Ensisheim, in the fifteenth century, corresponds exactly with the descriptions given of these stones, and of the ores examined by M. De la Lande. The results of his analysis are somewhat different; but he examined the whole heterogeneous compound, and not the parts separately. He concluded, that this mass contained 2 per cent. of sulphur, 20 of iron, 14 magnesia, 17 alumina, 2 lime, 42 silica. Mr Howard has very justly remarked, that the Professor's own account of his experiments is at variance with the idea of lime being contained in the substance; and that he has given no sufficient proof of the existence of alumina. It is also to be observed, that from the exceptionable method of analysis pursued both by Barthold and the academicians, the metallic particles were not examined with sufficient precision. The specific gravity of the stones examined by the academicians was to that of water, as 3535 to 1000. The specific gravity of the stone of Ensisheim, as tried by Barthold, was 3233; that of the stone examined by Gassendi (who saw it fall) was 14, common marble being 11; and, taking the specific gravity of marble to that of water, as 2716 to 1000, the specific gravity of the stone observed by Gassendi will be to that of water as 3456 to 1000. So near a coincidence between observations, made at such a distance of time, upon these various substances, cannot fail to strike us as very remarkable, and to prepare us for that fuller demonstration of their identity, which was reserved for the labours of our countryman Mr Howard.

This excellent philosopher has elucidated the subject of our present consideration, by a course of experiments as interesting and instructive as any that the science of chemical analysis can boast of. He fortunately obtained specimens of the stones which fall in several very distant quarters of the globe; at Bedrare, and in Yorkshire (as we have already described); near Sienna, and in Bohemia, according to evidence not altogether so satisfactory as that upon which the other narratives rest.

He began his inquiries, very judiciously, by a minute examination of the external mineralogical characters of these four substances;

substances; and in this part of his task he was indebted to the learning and expertness of the Count de Bourron. The substances were found to resemble each other very closely in their general appearances, and in the nature of their component parts. The chief difference consisted in the different proportions in which the same component parts were combined, so as to form the aggregate of the heterogeneous masses. Their specific gravities were nearly the same, unless that the abundance of iron in one of the masses caused a considerable increase of its gravity. It may contribute to the formation of a precise estimate, if we present, in one view, the results of the experiments made to measure the specific gravities of the most remarkable specimens hitherto examined. The four last in the list were calculated by the Count de Bourron. The specific gravity of water being 1000, that of the Ensisheim stone is

		3233
Gassendi's*		3456
Bachelay's†		3535
Yorkshire		3508
Sienna		3418
Benares		3352
Bohemia		4281

All the stones examined by Count de Bourron and Mr Howard were found to consist of four distinct substances; small metallic particles; a peculiar martial pyrites; a number of globular and elliptical bodies, also of a peculiar nature; and an earthy cement surrounding the other constituent parts. It was only the stone from Benares that Mr Howard could separate into its constituent parts, with sufficient accuracy, and in sufficient abundance, for a minute analysis of each. He found, however, that the nature of the metallic particles was the same in all; they were in each case an alloy of iron and nickel. In the pyrites of the Benares stone, nickel as well as iron was detected; and the easy decomposition of the pyrites by muriatic acid, in all the specimens, afforded a distinguishing character of this substance. The globules in the Benares stone contained silica, magnesia, and oxides of nickel and iron; the earthy cement consisted of the same substances, very nearly in the same proportions. In the other stones, these globules could not be easily separated from the cement and pyrites. Mr Howard, therefore, after freeing the aggregate as well as possible from the metallic particles, and several of the globules, was obliged to satisfy himself with analyzing the heterogeneous mass. Still the composition appeared wonderfully to agree with that of the basis and globules of

* Found in Provence.

† Found in the Maine.

the Benares stone; as the following Table, collected from Mr Howard's experiments, and reduced to the parts of a hundred, will clearly evince.

	Oxid of Nickel	Oxid of Iron.	Magnesia.	Silica.
Stone from Benares { Globules	2.5	34.	15.	50.
Cement	2.5	34.	18.	48.
— — — Yorkshire. Basis, i. e. earthy cement, } with some globules and the pyrites deprived } of its sulphur	1.3	58.	24.6	50.
— — — Sienna. Basis.	2.	34.6	22.6	46.6
— — — Bohemia. Basis	2.7	42.7	17.2	45.4

About the time that Mr Howard was engaged in these interesting researches, and before he had published the result of them, M. Vauquelin happened also to be occupied with the very same subject. He analyzed, though by a different process, the Benares stone, and two others which fell in 1789 and 1790 in the south of France. The results of his experiments agreed with those of our distinguished countryman in every particular; and we are now entitled to conclude, with perfect confidence, that the stones which have at different times fallen upon the earth, in England, France, Italy, and the East Indies, are precisely of the same nature, consisting of the same simple substances arranged in similar compounds, nearly in the same proportions, and combined in the same manner, so as to form heterogeneous aggregates whose general resemblance to each other is complete. We are further warranted in another important inference, that no other bodies have as yet been discovered on our globe, which contain the same ingredients; and, more particularly, that the analysis of these stones has made us acquainted with a species of pyrites not formerly known, nor anywhere else to be found.

The general analogy between these stones and the masses of native iron found in different parts of the world, was too striking to escape the eminent inquirers who have investigated this subject. They resemble each other in their external character, though not by any means so closely as the stones; but in one circumstance of their chemical composition, they have a remarkable similarity, both among themselves, and towards the stony substances. M. Proust, a considerable time before the date of Mr Howard's discoveries, had proved that the enormous mass of native iron found in South America, contained a large portion of nickel in its composition. Mr Howard was led to the same conclusion by analyzing another portion of this body; and he found that the solitary masses discovered in Siberia, Bohemia, and Senegal, contained a mixture of the same metal with iron, though in various proportions. The Bohemian

hemian iron is an alloy, of which nickel forms eighteen parts in the hundred; in the Siberian iron, it forms seventeen; and in the Senegal iron, five or six. But what is still more striking, and tends to place the similarity of their origin beyond all doubt, the Siberian mass is interspersed with cavities, containing an earthy substance of the very same nature as the earthy cement and globules of the Benares stone; nay, the proportions of the ingredients, according to Mr Howard's analysis, are nearly alike, if we except that of the oxide of iron, which is considerably smaller in the Siberian earth. This curious fact excites the strongest prepossession in favour of the idea, that the Siberian iron owes its origin to the same causes which formed and projected the different stones supposed to have fallen on the earth; and, coupled with the other details of the analysis, it naturally leads us to conclude, that the masses of native iron, as they are called, differ in no respect from the metallic particles, or the alloy of iron and nickel, which constitute one of the four aggregate parts in every stone hitherto examined.

It may be remarked, that, excepting the tradition of the Tartars respecting the fall of the Siberian iron from heaven, no external evidence has been preserved to illustrate the origin of those masses of native metal which have been analyzed by chemists. A tolerably authentic testimony has, however, been lately found, to prove the fall of a similar body in the East Indies. Mr Greville has communicated to the Royal Society (*Phil. Transf.* 1803, pt. I.), a very interesting document, translated from the Emperor Tchangire's Memoirs of his own reign. The Prince relates, that in the year 1620 (of our era), a violent explosion was heard at a village in the Punjab, and during the noise, a luminous body fell from above on the earth. That the amnil (or fiscal officer) of the district immediately repaired to the spot where the body was said to have fallen, and having found it to be still hot and not burnt up, caused it to be dug; when the heat increasing, he at last came to a lump of iron violently hot; that this was sent to court, where the Emperor had it weighed in his presence, and ordered it to be forged into a sabre, a knife, and a dagger; that the workmen reported it was not malleable, but shivered under the stroke; and that it required to be mixed up with one third part of common iron, when the mass was found to make excellent blades. The Royal historian adds, that upon the incident of this *iron of lightning* being manufactured, a poet presented him with a distich, purporting that, "during his reign, the earth attained order and regularity; that raw iron fell from lightning, and was, by his world-subduing authority, converted into a dagger, a knife, and two sabres."

The exact resemblance of the occurrence here related, in all its essential circumstances, to the accounts of fallen stones formerly detailed, and the particular observation upon the unmalable nature of the iron, give, it must be confessed, a very great degree of credibility to the whole narrative, and bestow additional weight on the inference previously drawn from internal evidence, that the solitary masses of native iron found in different quarters of the globe, have the same origin with the stones analyzed by Vauquelin and Howard.

We have now gone through the whole evidence, both with respect to the circumstances in which these singular bodies are found, the ingredients of which they are compounded, and the outward appearance and structure which they exhibit: we are now to consider the inferences respecting their probable origin, which this mass of information may warrant us to draw.

Independent of the distinct negative which the external evidence gives to any such conclusions, we are fully entitled to deny that these bodies are formed in the ground by lightning, or existed previously there, both from their exact resemblance to each other in whatever part of the earth they have been found, and from their containing substances nowhere else to be met with. It cannot surely be imagined, that exactly in those spots where fire, of some unknown kind, precipitated from an exploded meteor, happened to fall, there should exist certain proportions of iron, sulphur, nickel, magnesia and silica, ready to be united by the heat or electricity. Still less conceivable is it, that in every such fall of fire, those ingredients should first combine, by twos and threes, in the very same manner, and then that the binary and ternary compounds should unite in similar aggregates. But, least of all is it reasonable to suppose, that bodies formed in the earth should, upon being dug up, be found enveloped in a crust different from the rest of their substance, and bearing evident marks of having undergone the action of heat in contact with the air.

The same unquestionable resemblance which prevails among all these bodies, and, still more, the peculiar nature of the pyrites which they contain, prove very clearly that they have not a volcanic origin. Even if such an hypothesis were liable to no other objection, it would be inadmissible on this ground, that we know of no volcano which throws up so small a portion of matter, and so uniformly of the same kind. But though we were to admit the existence of this volcano, where must we place it, that its eruptions may extend from Bengal to England, France, Italy, and Bohemia; nay, from Siberia to Senegal and South America? And if we are forced to admit the existence of a series of such volcanoes, which are known to us only by these peculiar effects of their eruptions, do we

we not acknowledge that we are compelled to imagine a set of causes, without any other foundation for our belief in them, than our occasion for their assistance in explaining the phenomenon? In short, do we not account for one difficulty, by fancying a greater? But if it is alleged that the stones come from volcanoes already known, we demand, what volcano exists in the Peninsula of India, or in England, or in France, or in Bohemia? And if it is said that these bodies are projected by Hecla, Ætna, &c. to all manner of distances, we must ask, whether this is not explaining what is puzzling, by assuming what is impossible? It is surely much better to rest satisfied with recording the fact, and leaving it under all its difficulties, than to increase its wonders by the addition of a miracle.

The same remark may be extended to those who have fancied that the constituent parts of the stones exist in the atmosphere, and are united by the fire of a meteor, or by the electric fluid. We have no right to make any such hypothesis. We have never seen iron, silica, &c. in the gaseous state. These bodies may, for ought we know, be compounds of oxygen and azote or hydrogen, &c.; but as yet we have no reason to think so. Besides, he who amuses us with this clumsy and gratuitous explication, will probably account for every other phenomenon by a similar process of creation: He may, with equal plausibility, conceive the earth to be formed by a union of burnt gases, and then cover it with vegetables, and people it with living creatures, by a few more conflagrations and explosions. Such, however, is the theory most heavily expounded by M. Izarn—spun, with tiresome and unprofitable industry, into cobwebs, which touch every fact, without catching it—and enveloped in the mist of general logical positions, which faintly conceal the fundamental postulate—an entire act of creation.

From the whole, we may safely infer, that the bodies in question have fallen on the surface of the earth, but that they were not projected by any volcanoes, and that we have no right, from the known laws of nature, to suppose that they were formed in the upper regions of the atmosphere. Such a negative conclusion seems all that we are, in the present state of our knowledge, entitled to draw. But an hypothesis may perhaps suggest itself, unincumbered by any of the foregoing difficulties, if we attend to the following undoubted truths.

As the attraction of gravitation extends over the whole planetary system, a heavy body, placed at the surface of the Moon, is affected chiefly by two forces; one drawing it towards the centre of the Earth, and another drawing it towards that of the Moon. The latter of these forces, however, is beyond all com-

parison greatest at or near the Moon's surface. But as we recede from the Moon, and approach to the Earth, this force decreases, while the other augments; and at one point between the two planets, these forces are exactly equal—so that a heavy body, placed there, must remain at rest. If, therefore, a body is projected from the Moon towards the Earth, with a force sufficient to carry it beyond this point of equal attraction, it must necessarily fall on the Earth. Nor would it require a very great impulse to throw the body within the sphere of the Earth's superior attraction. Supposing the line of projection to be that which joins the centres of the two planets, and supposing them to remain at rest; it has been demonstrated, on the Newtonian estimation of the Moon's mass, that a force of projection moving the body 12,000 feet in a second, would entirely detach it from the Moon, and throw it upon the Earth. This estimate of the Moon's mass is, however, now admitted to be much greater than the truth; and upon M. De la Place's calculation, it has been shown that a force of little more than one-half the above power would be sufficient to produce the effect. A projectile, then, moving from the Moon with a velocity about three times greater than that of a cannon ball, would infallibly reach the Earth; and there can be little doubt that such forces are exerted by volcanoes during eruptions, as well as by the production of steam, from subterranean heat. We may easily imagine such cause of motion to exist in the Moon, as well as in the Earth. Indeed, several observations have rendered the existence of volcanoes there extremely probable. In the calculation just now referred to, we may remark, that no allowance is made for the resistance of any medium in the place where the motion is generated. In fact, we have every reason to believe, from optical considerations, that the Moon has no atmosphere.

A body falling from the Moon upon the Earth, after being impelled by such a force as we have been describing, would not reach us in less than two days and a half. It would enter our atmosphere with a velocity of nearly 25,000 feet in a second; but the resistance of the air increasing with the velocity, would soon greatly reduce it, and render it uniform. We may remark, however, that all the accounts of fallen stones agree in attributing to the luminous bodies a rapid motion in the air, and the effects of a very considerable momentum to the fragments which reach the ground. The oblique direction in which they always fall, must tend greatly to diminish their penetrating power.

While we are investigating the circumstances that render this account of the matter highly probable, we ought not to omit one consideration,

consideration, which lies wholly in the opposite scale. The greater part of these singular bodies have first appeared in a high state of ignition; and it does not seem easy to conceive how their passage through so rare a fluid as the atmosphere could have generated any great degree of heat, with whatever rapidity they may have moved. Viewing as we do, the hypothesis of their lunar origin as by far the most probable in every other respect, we will acknowledge that this circumstance prevents us from adopting it with entire satisfaction. And while we see so many invincible objections to all the other theories which have been offered for the solution of the difficulty, we must admit that the supposition least liable to contradiction from the facts, is nevertheless sufficiently exceptionable, on a single ground, to warrant us in concluding with the philosophical remark of Vauquelin, ‘ Le parti le plus sage qui nous reste à prendre dans cet état des choses, c'est d'avouer franchement, que nous ignorons entièrement l'origine de ces pierres, et les causes qui ont pu les produire.’

If, however, a more extensive collection of accurate observations, and a greater variety of specimens, shall enable us to reconcile the discrepancy, and to push still farther our inquiries into the nature of the new substance, a knowledge of the internal structure of the Moon may be the splendid reward of our investigations. And, while the labours of the Astronomer and Optician are introducing new worlds to our notice, Chemistry may, during the nineteenth century, as wonderfully augment our acquaintance with their productions and arrangement, as she has already, within a much shorter period, enlarged our ideas of the planet which we inhabit.

ART. XIII. *Analytical Institutions* : In Four Books. Originally written in Italian by Donna Maria Gaetana Agnesi, Professor of the Mathematics and Philosophy in the University of Bologna. Translated into English by the late Rev. John Colson, M. A. F. R. S. and Lucasian Professor of the Mathematics in the University of Cambridge. Now first printed from the Translator's Manuscript, under the inspection of the Rev. John Hellins, B. D. F. R. S. and Vicar of Potter's-Pury, in Northamptonshire. 2 Vol. 4to. London. 1801. Sold by Wingrave.

A work on the most profound of the mathematical sciences, from the pen of a lady, can hardly fail to be an object of attention. It has indeed been so among the learned on the continent

tinent for many years, and the author of it considered as one who, without taking into account the indulgence due to her sex, is entitled to rank high among the mathematicians of the 18th century. We regret, however, that of the history of a person so extremely interesting, but few particulars have yet come to our knowledge. The editor of the translation before us has collected some anecdotes; one of which, extracted from the President de Brosse's letters from Italy, is truly singular, and, though of undoubted authenticity, calls to mind the marvellous stories which are told of *PICA DI MIRANDOLA*, and the *Admirable CREIGHTON*.

De Brosse, in passing through Milan (about the year 1740), was carried to a *converzatione* on purpose to meet Signora Agnelli, whom he describes as a young lady about 18 or 20, who, though she could hardly be called handsome, had a fine complexion, with an air of great simplicity, softness, and female delicacy,

'There were,' says he, 'about thirty people in the room, many of them from different countries in Europe, who formed a circle round the lady and a little sister who accompanied her. The count Belloni addressed her in a fine Latin speech, with the formality of a college declamation. She answered with great readiness and ability in the same language; and they then entered into a disputation (still in Latin) on the origin of fountains, and on the causes of the ebbing and flowing which is observed in some of them like the tides in the sea. She spoke on this subject like an angel, and I never heard it treated in a manner that gave me more satisfaction.'

'The Count then desired me to enter with her on the discussion of any other subject I chose, provided that it was connected with mathematics or natural philosophy. After making the best apology I could to the lady for my want of sufficient skill in the Latin language to make me worthy of conversing in it with her, we entered, first, on the manner in which the impressions made on the senses by corporeal objects are communicated to the brain or general sensorium; and afterwards on the propagation of light, and the prismatic colours. Another of the company then discoursed with her on the transparency of bodies, and on curvilinear figures in geometry, of which last I did not understand a word.'

'She spoke wonderfully well on all these subjects, though she could not have been prepared before hand, any more than we were. She is much attached to the philosophy of Newton; and it is marvellous to see a person of her age so conversant with such abstruse subjects. Yet, however much I was surprised at the extent and depth of her knowledge, I was still more amazed to hear her speak Latin with such purity, ease and accuracy, that I do not recollect any book in modern Latin written in so classical a style as that in which she pronounced these discourses. The conversation afterwards became general, every one speaking in the language of his own country, and she answering in the same language; for her knowledge of languages is prodigious. She told me that she was

Sorry that the conversation of this visit had taken so much the formal turn of an *academical disputation*, and that she very much disliked speaking on such subjects in numerous companies, where, for one that was amused, twenty were probably tired to death.—I was sorry to hear that she intended to go into a convent and take the veil, not from want of fortune, for she is rich, but from a religious and devout turn of mind, which disposes her to shun the pleasures and vanities of the world.'*

After her work of the *Istituzioni Analytiche* was published, she was made professor of mathematics and philosophy in the University of Bologna. But neither the admiration she everywhere met with, nor the entreaties of her friends, could prevent her from executing the resolution she had taken of secluding herself from the world. After the death of her father, she retired to a convent of *blue nuns*, remarkable for the austerity of its rule; and ended her days in one of those retreats, in which mistaken piety has so often buried the charms and accomplishments, the virtues and the talents which might have adorned and improved society. The fate of Pascal and Agnesi will remain a melancholy proof, that the most splendid abilities, and the highest attainments in literature and science, cannot always defend the mind against the inroads of superstition and fanaticism.

Mr Hellins, the editor of the present work, has quoted Montucla's encomium on this extraordinary woman, to which we must beg leave to add another of still higher authority, that of her countryman Frisi, who has excelled so much both in pure and mixt mathematics. 'DOMINA MARIA CAJETANA AGNESIA Analyticas Institutiones edidit anno 1748, opus nitidissimum, ingeniosissimum, et certe maximum quod adbuc ex fæmina alicujus calamo prodierit.' Friesi Opera, Praef. tom. Iius. A French mathematician of great eminence, M. Bossut, has also bestowed on the *Istituzioni Analytiche* the most unequivocal praise, by translating the 2d volume of it into French, and inserting it in his course of mathematics, professedly as the best treatise he could furnish on the elements of the differential and integral calculus.

It is to the liberal and enlightened patronage of Baron Maseres, to which the mathematical sciences are already under so high obligations, that we are indebted for the present translation of this work into English. The translation was made many years ago by the late Professor Colson, the ingenious commentator on the Fluxions of Newton. Baron Maseres, who in his youth had known Colson, and had reason to suppose from his conversation,

* In the edition of de Brosse which we have seen, the lady's name is spelt, throughout, Agnery. The Monthly Review, from which Mr Hellins made his extract, seems to have corrected this error very mal-a-propos by spelling it Anglese.

that he had written a treatise on the higher geometry, as an addition to the commentary just mentioned, was desirous of discovering this manuscript, and of giving it to the world. In his search he found, not the work he looked for, but the translation just mentioned ; and after removing some pecuniary difficulties, which, without such generous assistance, would probably have forever withheld it from the world, he obtained a copy of it, and put it into the hands of Mr Hellins, who undertook to become the editor.

In reviewing a book that comes before the public with so many extrinsic circumstances in its favour, an effort is required to preserve impartiality, and particularly, in the present case, to prevent our admiration of the author from influencing our opinion of her work. We have perused it accordingly, keeping this caution continually in view ; and the favourable judgement we have nevertheless to report, is formed, we flatter ourselves, entirely on the intrinsic merit of the book.

The Analytical Institutions are divided into four books. The first contains the analysis of finite quantities, and occupies the whole of the first volume. The remaining three make up the 2d volume, and treat of the analysis of infinitely small quantities. Each of these books is divided into sections ; and a running margin renders the whole very convenient to peruse and to consult.

The First book begins, of course, with the ordinary rules of algebra, the solution of simple equations, &c. ; and in this most elementary part we do not perceive any peculiar excellence, except the uncommon clearness with which every part of the Institutions is written. It is in treating of variable magnitudes, or of the application of algebra to geometry, that the peculiar elegance of Donna Agnesi's analysis first begins to appear. The subject of *Loci*, in itself so beautiful and interesting a part of geometry, could not fail to attract the attention of one who pursued that science merely for the love of it. The examples which she gives are well chosen ; the analysis of them is always ingenious, and conveys much instruction concerning the methods and principles of investigation. This part of the work is indeed eminently calculated to improve the student of geometry ; and though other treatises on the same subject, more complete and systematic, have appeared since this was written, we do not believe that their exists, at the present moment, any one so well adapted to communicate solid and *practical* instruction in this branch of analysis, or so likely to sharpen the invention of a beginner, and to make him well acquainted with the resources of his art.

These observations are also applicable to the construction of determinate problems, by the intersection of *Loci*, in which great address

address and ingenuity are often displayed. Signora Agnesi appears to prefer the solution of equations by such constructions to the solutions, which, like Cardan's rule, are purely algebraical. The universality of the former method is the reason she hints for that preference; and to one who studied this branch of mathematicks, merely for its own sake, such an argument might seem unanswerable, and is evidently the same which influenced the Greek geometers in the attempts they made to resolve problems of the higher orders. It will, nevertheless, be recognized as an erroneous opinion, by those who consider every individual part of the mathematicks as a step to something beyond it, and who, of consequence, regard those solutions as most valuable, which directly express the magnitude of the things sought, in terms of the things given.

The solutions, however, that are delivered in these Institutions, by the construction of *Loci*, possess an uncommon degree of elegance; and they give such a familiarity with the management of equations, and with the different ways of combining them, that they well deserve the attention of the student. In the books which treat of the analysis of Infinites, the same elegance and perspicuity prevail.

The Second book begins with laying down seven theorems, relative to the different orders of Infinitesimals, and explaining when a quantity is so small, that it may be rejected in respect of another which is itself evanescent. These propositions may appear exceptionable, in point of language, to the *rigorists* in geometry; but they are nevertheless founded on good principles, and furnish rules for the comparison of evanescent quantities, which will prove safe guides in investigation. The demonstrations appear to us to be perfectly sound (if the word *infinite* be taken in its true sense, as denoting merely the absence of any limit), with the exception, perhaps, of the first theorem, which (as is not a little curious to remark) is liable to the same objection that has been made to the first lemma of Newton's Principia. In both instances, also, the error is rather apparent than real. Signora Agnesi and Madame Chastellet are probably the only women, who, either in the excellences or the defects of their writings, may refer to Newton, as a standard of comparison.

These theorems are followed by the differential calculus, or the direct method of fluxions, the language and notation of which last are adopted by the translator throughout the whole. The general rules for differentiating are very distinctly explained; and the application of them to drawing tangents, to determining *maxima* and *minima*, the radius of curvature, &c. is pursued through a variety of examples.

The Third book treats of the integral calculus, or the finding of fluents. The general methods of integrating formulas, containing one variable quantity, are first laid down, whether the integrals be expressed in algebraic terms, by logarithms, or circular arches.

The principles thus established are next applied to the quadrature and rectifications of curves, the complanation of surfaces, &c. &c. Here, as in every part of the work, the examples are chosen with uncommon felicity; and, in the treatment of them, there is often displayed not only much skill, but a great degree of originality and invention.

The Fourth book treats of the integration of fluxional equations involving two variable quantities. It is here that greatest room is given for the exercise of ingenuity and invention, and that the author displays most her skill in analytical investigation.

The methods laid down for performing such integrations are superior, we believe, to any other known at the time when this book was written, and to any that have been yet given by an English author. The method of integrating the equations called homogeneous, by introducing a new variable quantity, and making $y = x^z$, is very fully explained in the Analytical Institutions (Book 4. sect. 3.), and we believe is not yet to be met with (at least in a general form) in any of our English systems. The equation

mentioned by Mr Hellins in his advertisement, $\frac{x}{y} + \frac{y}{x} = \frac{x^m x}{a y^n}$, is

another instance of the same kind, as this equation was pronounced, by so expert an analyst as Thomas Simpson, to admit of integration (by the invention of a multiplier) only in one case, viz. when $n = 1$, whereas Agnesi integrates it generally for all values of m and n . Indeed, the whole of the first section, where she treats of the integrating of equations by multipliers, is extremely valuable, as she has always been careful to explain the views which guided her to the discovery of the multipliers actually employed.

Though, in reviewing this work, we labour under the same disadvantage that the editor did in publishing it, that of not having the original before us, we cannot help thinking that, in one passage of the fourth book, an error has been committed by the translator, which has directly reversed the sense.

The passage we mean is at § 14. Sect. 2. where it is said, ‘ But, however, the method of substitutions is nevertheless universal,’ (that is, the method of separating the variable quantities in a differential equation by the introduction of a new variable quantity), ‘ the greatest difficulty of which is, that it is often very hard to know what substitutions ought to be made, that we may not work by chance, and bestow much labour unsuccessfully.’

successfully.' Now, the method which Signora Agnesi is here speaking of is not universal, or, at least, it has never been found so, even in the hands of the most skilful and experienced mathematicians; and it does not appear, either from what goes before this sentence, or from what follows after, that she herself considered it as of general application. Still, however, some doubt is left, whether the error is in the original or the translation; but this doubt is removed, and the fault thrown entirely on the latter, by turning to Boslüt's edition already mentioned. The passage, as given there, runs thus: 'Mais outre que la méthode des substitutions n'est pas universelle, la grande difficulté qu'on rencontre en l'employant, c'est la peine & presque l'impossibilité qu'il y a de savoir la substitution qu'il faudroit faire, pour ne pas opérer au hasard, et pour éviter beaucoup des tentatives inutiles.' The assertion here is directly the contrary of that in Colson's translation; and as it is agreeable to the truth, and conformable to the context, it must be received as the genuine interpretation, at least till we can have an opportunity of comparing the passage with the original Italian.

Were we sure that this error, which is an important one, had not escaped Colson from mere inattention, it would set the mathematical knowledge of the Milanese lady considerably above that of the Lucasian Professor.

To the English reader this fourth book must indeed be regarded as a great acquisition. In the two former divisions of the calculus, we possess books of great merit, that are in the hands of every mathematician; such, for instance, as the *Harmonia Mensurarum*, Maclaurin's and Simpson's Fluxions, with one or two more. But, concerning the integrating of equations, where all the variables are mixt together, we possess no work of much consideration, though this is the part of the calculus to which we must look for almost all the new and important discoveries that remain to be made, either in pure, or in the mixt mathematics. Simpson, our best elementary writer, treats of this subject very imperfectly, as it were by accident, and to no extent. The later books on Fluxions, in our language, go no further than Simpson, and are many of them but indifferent abridgements of his valuable work. Sir Isaac Newton, indeed, who could so well judge of the relative importance of objects, even before he had leisure to make a full examination of them, treats of fluxional equations as a most important branch of the new calculus; yet he chiefly teaches how to integrate those equations by approximation, and has perhaps too much overlooked the methods that lead to perfect and exact results. The methods followed by Donna Agnesi are of this latter kind, and were, no doubt, the part of her work

work which struck COLSON the most, and gave rise to his very spirited resolution of learning a new language at an advanced period of life, that he might make himself perfectly master of them. Had this translation been published immediately after it was executed, there can be little doubt that it would have materially contributed to accelerate the progress of the mathematical sciences in England. Even the publication of it at present must be conducive to that end ; and the Analytical Institutions of Agnesi will serve as the best introduction to the works of Euler, and the other mathematicians of the Continent, on whose writings we, in this country, have bestowed so much less attention than they deserve.

It is true, that, having been written more than fifty years ago, during which time many branches of analysis have been greatly improved, the work before us cannot but be imperfect in some things, when compared with more modern productions. The arithmetic of sines and cosines, or the application of algebra to trigonometry, was not known to Agnesi ; for this new algorithm made its first appearance (or nearly its first) in the introduction to the Analysis of Infinites of Euler, and was published at Lausanne in the same year that the Analytical Institutions appeared in Italy.

So also the integrating of differential equations has been greatly improved during the same period, both by Euler and others ; and particularly, the criterion for determining whether such equations are integrable or not, has been discovered since the time of Signora Agnesi. This criterion is added to her work by Bossut, in his edition of it mentioned above ; and the English editor would have done a great favour to his readers, if, in this instance, he had followed the example of the French geometer, with which, however, we are not sure that he was acquainted. The favour done to the public would have been the greater, that we have not, in English, any book in which this most useful rule is delivered. Mr Hellins, indeed, proposes to make some additions in a future publication ; and we may perhaps hope to find the criterion of integrability in that number.

As the work now before us seems to be so well adapted to the common use of students in the mathematicks, we regret that it was not rather given to the world as an octavo, than in the more expensive form in which it now appears. In a new edition this fault will probably be corrected.

Though we cannot but commend the diligence and skill with which Mr Hellins has discharged the duty of an editor, we must say, that one paper, which he has subjoined to the Analytical Institutions, has a little excited our surprise. This is a fragment of

of Colson's, containing some mathematical questions, thrown into the form of a dialogue, between a master and his scholar. The questions themselves are nowise remarkable, and have little in them either to praise or to blame. But to convert the enunciation of a mathematical problem into a dialogue, and to think that by so puerile a device any good purpose can be served, as to the understanding of the question, or the discovery of the solution, appears to us highly absurd. It is a conceit that might be amusing to boys, who wanted to play at schoolmasters, as they term it; but we should hardly have expected to meet with it in a grave treatise of geometry, or as an addition worthy of being made to a work of such merit, as that which is now before us.

It is true, that Colson himself has added something of the same kind to his commentary on Newton, where it is, if possible, more out of its place than in the present instance. There is more apology, however, for an author being partial to his own concerts, than for others approving of them. For our part, as we have great respect for Colson's science, but not much for his taste, we should be glad to see this and some other things left out of his commentary; and we cannot but hope, that the fine landscape, with the Greek motto at the bottom of it, inserted in the body of that work, as well as the fragment we are now speaking of, may hereafter be expunged, for ever, by the hand of some friendly editor.

The letter of *Philalethes Cantabrigiensis* to the Publisher of the Gentleman's Magazine, is another addition that we think might have been very well dispensed with. Not that we object at all to the quotation from the Preface of the *Scriptores Logarithmici*, or to the praise so justly bestowed on the editor of that valuable collection; but because we think that declamations against the vice and folly of the age, are more closely connected almost with any subject, than with the abstract speculations of geometry. It is true, the author tries to establish such a connexion, when he calls upon 'those noblemen and gentlemen who of late have made so conspicuous a figure in Westminster-Hall, and on all who are wasting their time and money in the seduction of the *wives* and *daughters* of their friends,' to exchange these amusements for the honour of becoming such men as Napier, Bacon, or Newton; and, instead of squandering away thousands on *courtezans*, to lay out a few hundreds in printing books of science and philosophy.

We must say, however, that we do not believe that much is to be hoped for from this solemn exhortation; and we fear that the gentlemen to whom the letter-writer addresses himself, will neither

neither take the trouble to dispute his principles, nor to follow his practice. But *Philalethes Cantabrigiensis* is not one to be deterred by ordinary difficulties ; there could hardly be more unpromising materials for making mathematicians and philosophers of, than those he has taken in hand. He begins his reformation precisely at the point where greatest resistance might be expected ; and it is certainly true, that, in this instance, he has taken the *bull by the horns*.

But whatever opinion be entertained of the appendages which good intention, rather than good taste, has introduced into these volumes, the work itself, we believe, will unite all suffrages in its favour ; and Baron Maseres may reflect with pleasure on having made known to his countrymen an author so deserving of their attention. The mathematical world is already sensible of the favours it has received from his disinterested love of science, and has now an additional kindness to acknowledge.

We cannot take leave of a work that does so much honour to female genius, without earnestly recommending the perusal of it to those who believe that great talents are bestowed by nature exclusively on men, and who allege that women, even in their highest attainments, are to be compared only to *grown children*, and have, in no instance, given proofs of original and inventive powers, of a capacity for patient research, or for profound investigation. Let those who hold these opinions endeavour to follow the author of the Analytical Institutions through the long series of demonstrations, which she has contrived with so much skill, and explained with such elegance and perspicuity : If they are able to do so, and to compare her work with others of the same kind, they will probably retract their former opinions, and acknowledge that, in one instance at least, intellectual powers of the highest order have been lodged in the breast of a woman.

At si gelidus obfiterit circum praecordia sanguis ;

and if they are unable to attend this illustrious female in her scientific excursions ; of course, they will not see the reasons for admiring her genius that others do ; but they may at least learn to think modestly of their own.

ART. XIV. *Récherches et Expériences Médicales et Chimiques sur le Diabète Sucré, ou la Phthisie Sucrée.* Lues à l'Institut National, par les C.C. Nicolas, Associé de l'Institut National, Professeur de Chimie aux Ecoles Centrales du Calvados : et Victor Gueudeville, Docteur en Médecine à Caen. 8vo. à Paris. 1803.

THE attention of physicians has of late years been particularly directed to that very singular disease, *Diabetes Mellitus*, which is the subject of this memoir. The formation of large quantities of

of sugar in the animal body, is in itself so curious a circumstance, that not only medical men, but several distinguished chemists have engaged in inquiries concerning its nature and its origin. Much was expected from such a cooperation.

From the application of the principles of modern chemistry to medical science, many useful and important discoveries were anticipated ; and the phenomena of *Diabetes Mellitus* have been often referred to as the best proof of the reasonableness of such expectations. Some persons were so enthusiastic as to suppose, that not only the causes of all diseases would be detected, but that the cure of those hitherto deemed almost incurable would be accomplished ; and that the mode of action of those remedies, which long experience has sanctioned, might be readily explained. But the newly-discovered gases have not succeeded in curing *phthisis pulmonalis* ; the supply of oxygen alone will not remove *syphilis* ; and *deoxygenating the system* has failed to cure *diabetes*. Disappointment and regret have succeeded to the most confident hopes ; because the discoverers in the very interesting path of chemical physiology have overrated the value of their exertions, and, without a previous knowledge of a sufficient number of facts, too hastily formed some general conclusion. This seems to have been the great fault of Dr Rollo's publication, in which it was confidently asserted, not only that the causes of diabetes were discovered, but that a new and successful mode of cure was found out. It is now several years since Dr Rollo first published his *Cases* ; and his opinions and practice must be considered as having undergone that test of truth which is afforded by liberal discussion and extensive experience. This subject, however, appears new to the French physicians ; and they speak in the same confident tone about the causes and cure of diabetes, as was once common in this country, but which has lately been considerably abated.

Instead of the term *diabète sucré*, Messrs Nicolas and Gueudeville have substituted *phthisurie sucrée*, which they consider as more expressive, and more analogous to their definition of the disease. But as no good reasons are alleged in support of the alteration, we shall continue to employ the nosological phrase *diabetes mellitus*, which may now be considered as established by custom and authority.

In the first part of their memoir, these authors profess to give the literary and natural history of diabetes, and to detail all the knowledge which physicians in former ages had acquired concerning it. This historical sketch, however, is extremely superficial, and in many respects incorrect. These writers do not seem to have directed their reading to any good purpose ; they have

have overlooked sources of correct and valuable information, and they have perverted others, which have no relation to the subject. To justify this remark, we may just notice, that they have quoted Hippocrates as the author of an observation on diabetes, though it is well known to all those who have consulted the works of that distinguished observer, that he has taken no notice of this disease. And, in another part of their essay, they have introduced several quotations from a dispute between *Riolan* and *Bartholin*; because, in this controversy about the termination of lymphatic vessels, they pretend to have discovered the first dawn of light which was thrown on the nature of diabetes. The French physicians seem to be very jealous of the reputation which our countryman Dr Rollo has acquired by his publication; and the chief object of their laborious research, is to point out to the world, that what Dr Rollo has said had been often said before. This, we believe, no one will feel disposed to deny; but we cannot think with our authors, that Dr Rollo was guilty of any great presumption in publishing his book, without once referring to the dispute between two doughty knights of the scalpel, especially as the point in question was utterly foreign to his subject. We must confess that we have sometimes been amused, and sometimes disgusted, with the vanity and ignorance displayed throughout this memoir, in quoting and referring to the works both of the ancients and moderns. But experience has taught us how to estimate this affectation of learning, which the authority and example of some Continental writers seem calculated to encourage. If Messrs Nicolas and Gueudeville had contented themselves with consulting *Plouquet's Bibliotheca Medicopractica*, or with copying from a very elaborate historical sketch of diabetes,* published in this country a few years ago, their pages might have been graced with a longer and more accurate list of references, and their readers would have received more satisfactory information from their learned inquiries.

After some general remarks, we find four cases of diabetes detailed. The first of these was a poor man, advanced in life, who had been accustomed to hard labour and bad food. The second was an old maid, who had suffered from many complaints peculiar to her sex. An exhausted debauchee was the subject of the third history. And an elderly man, who died from fever and emaciation, after the disease had continued four years, was the fourth. All these patients were of the sanguine temperament; their complaints seem to have originated from very different causes;

* *Vide a case of diabetes, with an historical sketch of that disease, by Thomas Girdlestone, M. D. 8vo. Yarmouth. 1799.*

causes ; and all of them are described as having the symptoms, mentioned by *Aretaeus*. Of these cases, the second and the third appear very inaccurately drawn up, if not composed in the closet. They resemble cases of symptomatic diabetes, recorded by *Sydenham*, *Boerhaave*, *Van Swieten*, *Cullen*, and other systematic writers, which have occurred after other diseases. The age and condition of the patients, the symptoms which existed, and, above all, the very speedy removal of them by tonic medicines, seem to corroborate such an idea. The great surplus of urine discharged, in one case it is said more than two thirds, and, in another, double the quantity of liquid *ingesta*, would make us feel inclined to distrust the history, especially when we are told that a complete cure was effected in a short time.

Aretaeus is the only author who has recorded the first symptoms of diabetes. His account however is very suspicious, from his own confession that he had seen very few cases, and from the manner in which he relates the symptoms. For if we admit that he described the disease as he saw it, and wrote from observation, not from the reports of others, it impeaches his acknowledged accuracy ; since nothing but *ischuria* could occasion many of the symptoms and feelings which he attributes to diabetes. We must confess that we are strongly disposed to think, with *Dr Lubbock*, that the *Cappadocian*, in his history of this complaint, has given way to the impulse of astonishment, and written more from fancy than from actual observation. When he details symptoms, and mentions phenomena, contrary to universal experience, and inconsistent with all the known laws of the animal economy, we surely have a right to distrust his account altogether, and consider it, not as authentic, but fabulous.

Hence we were not a little surprised to find *Messrs Nicolas and Gueudeville* making a division of this disorder into three distinct stages, and detailing, from *Aretaeus*, the symptoms peculiar to each. Such is the apparent regularity of the animal functions in the beginning, nay, in some instances, throughout the whole course of this complaint, that it is often extremely difficult to ascertain the period of its first attack. Neither thirst, nor increased appetite, nor copious flow of urine, are sufficient to induce people to complain, till more urgent symptoms arise. Nothing but very limited experience, or excessive enthusiasm for antique relics, could have induced these authors to quote such passages from the writings of *Aretaeus*, or to follow, in this instance, such an example ; for though *Don Quixote* believed, even *Sancho* sometimes doubted.

The following summary will be found to contain the general result of the speculations and experiments detailed in this essay. We shall quote these propositions in the words of their authors, that we may not incur any censure from misstatement of those particular points on which we may feel disposed to differ from them.

* 1. La phthisurie est une consommation entraînée par une déviation spasmodique et continue des sucs nutritifs non animalisés, sur l'organe urinaire.

* 2. Cette affection paraît particulièrement aux tempéramens musculeux.

* 3. Son siège est placé dans l'appareil digestif.

* 4. Les autres parties ne sont affectées que secondairement.

* 5. Les sucs gastriques, pancréatiques, biliaires, sont altérés par la présence des sucs nutritifs non animalisés.

* 6. Toutes les autres sécrétions et excretions étant suspendues, l'organe urinaire y supplie par l'excès de ses évacuations.

* 7. L'analyse chimique a prouvé que ces urines ne contiennent pas point d'urée, d'acide urique, et benzoïque, et que les sels phosphoriques sont en très-petite quantité.

* 8. Ces urines passent à la fermentation vineuse et acétoise, on en retire un alcool d'une odeur désagréable : enfin, un sucre cristallisé dont la nature n'est pas encore connue.

* 9. Le sang est très-séreux, les sels ammoniacaux et phosphoriques très-rares.

* 10. La présence du sucre, la rareté des sels excrémentiels, l'absence des urées, dont le retour n'a lieu qu'après la disparition de la matière sucree, démontrent que cette dernière dépend de la non-animalisation des sucs nutritifs, causée par le défaut d'azote.

Deux indications se présentent à la médecine : 1. Remédier à l'état spasmodique : 2. Rendre au malade les principes d'animalisation. Pour arriver à ce but, elle doit chercher les alimens et les remèdes parmi les substances qui contiennent l'azote et les sels phosphoriques. La saveur sucrée ne disparaît qu'après la guérison des autres symptômes. Le retour de l'urée et des sels urinaires est la preuve d'une cure complète. Enfin, le phthisique étant sujet à des réchutes, l'usage des médicaments indiqués doit encore être prolongé quelque temps après la guérison du malade. p. 99.

In taking a general view of this disease, we are first struck with its more frequent occurrence in modern times, than in the earlier ages. The different modes of living, the imaginary change of constitution, or the more general use of wine and spirituous liquors, do not afford a satisfactory explanation of this circumstance. After all, perhaps diabetes does not occur more frequently now, than formerly; but is better distinguished by medical practitioners. One reason why it was so seldom met with by the older

older physicians may be, that the strongly marked cases of it came generally under the care of those ignorant and impudent quacks who pretended to cure all diseases by looking at the urine. Such quick-sighted mortals were at one time very numerous, to the disgrace of the Legislature and the human understanding. The race is not yet wholly extinct in this country, much less on the Continent, though *uroscopy* has, in some measure, given way to *cranioscopy*, *metallic tractors*, and other such absurdities! With regard to the first conclusion which Messrs *Nicolas* and *Guédeville* have made, that this disease depends upon a particular determination of imperfectly assimilated fluids to the kidneys, we cannot avoid remarking, that this is the general opinion among all those who have attempted to give any explanation. Galen, in one part of his works (*de Crisibus*, lib. I. cap. 3.), considers diabetes, like the lientery, as a *necrosis* or death of two important functions, assimilation and absorption; and this opinion has been frequently brought forward. Each writer has varied his mode of expression, and imagined himself creating a new theory, when he was only indulging his fancy in decorating an old one. What reason our authors have for supposing the existence of spasm, we are totally at a loss to conjecture. What is spasm? Is there any symptom of this disorder which partakes of a spasmodic nature? Induction tells us that there is not; sound reasoning forbids us to admit any such hypothetical conclusion. But the previous question concerning the existence of spasm seems never to have occurred to these gentlemen. No obstacle of that kind interrupts them. They go on explaining every symptom, with the greatest plausibility. They tell us,

— that, in health, the oxygen in the stomach is gradually combined with the azote in the large intestines; that hydrogen increases in quantity in passing from the stomach to the small intestines, and then diminishes in the large ones; and that carbonic acid gas, which is most abundant in the stomach, unites with these gases, and all are then mixed with the chyle. If the body becomes weakened by haemorrhages, or protracted diseases, the blood is more serous, and does not furnish azote in sufficient quantity for the animalization of the food: hence, the oxygen, hydrogen, and carbon, which are always to be found in the stomach and intestines, unite, and form sugar. The derangement of all the functions arises from the want of azote, the principle of animalization. The chyle is not allowed to remain a sufficient time to be animalized, but is rapidly absorbed, to support the system; and this absorption, nature is never able to accomplish without a spasmodic effort.' p. 39.

Now, can these authors prove, in any single instance, that what they have said is true? Have they examined the first *data*, the fundamental facts on which all the reasoning depends? We will venture to say they have not. They have taken these and

many other questions for granted, in the whole course of their speculations ; and till they can show that azote is deficient in diabetic patients, we must regard their reasoning, from such vague and uncertain premises, as false. Besides, referring the proximate cause of this disease to a deficiency of azote, is only substituting *quid pro quo* : it is nothing more nor less than a repetition of Dr Rollo's hypothetical conjecture, that all the phenomena of the disease arose from an *hyperoxygénéation* of the system. Of this, there are no proofs whatever : all appearances are against such a supposition. If oxygen was in excessive quantity, or, what is the same thing, if the proportion of azote was lessened, from what we know of the effects of these substances, we should observe some remarkable changes produced on the nervous system, and on the irritability of the muscular fibre, which do not happen. The reasons assigned for the kidneys receiving so large a quantity of the half-formed chyle, appear to display as much originality of thought, as profound knowledge of anatomy. It is said, p. 41. ' that the emulgent arteries and kidneys receive the greatest part of the imperceptibly assimilated matter, because they are situated near the centre of union, (*pièces du foyer sympathique*), and because they have such extensive communications by means of their lymphatic vessels ! '

Respecting the accuracy of the second position, that diabetes is peculiar to persons of the sanguine temperament, we must also be permitted to express our doubts. The four cases which are mentioned, cannot be deemed sufficient to warrant such a general conclusion. Although this disease may be more frequent among persons of florid appearance and full habit, yet it is not peculiar to them ; for we have seen men with dark complexion and black hair labouring under it ; and some similar cases are recorded. Nor is it confined to strong muscular subjects, or to the latter periods of life, or to constitutions impaired by excessive bodily and mental exertion, as stated in several parts of this essay.

The three next paragraphs of the summary already quoted, require a more full and particular investigation, as they include the outlines of the prevailing theory of the present day. It is not a new opinion, to refer diabetes to some primary affection of the stomach. The same notion was entertained by many authors of the last century. Within these few years, this theory, if it deserves such an appellation, has been brought forward with some ornaments borrowed from modern pneumatic chemistry, and has attracted considerable attention. The merit of Dr Rollo's publication has always appeared to us to consist, not in any novelty and originality of the theory of diabetes, nor in the reasoning by which that theory was attempted to be supported, but in the fair

fair and candid statement of symptoms; and the result of the practice in removing them. It would be improper, at this time, to enter upon a particular discussion of Dr Rollo's opinions. We shall therefore content ourselves with briefly noticing the leading points of his theory, because it corresponds with that now under consideration.

Dr Rollo alleges, that diabetes consists 'in an increased morbid action of the stomach, with too great a secretion, and an alteration in the quality of the gastric fluid, producing saccharine matter, by a decomposition of the vegetable substances taken in with the food, which remains unchanged.' p. 387. (*Cases of Diabetes Mellitus, 2nd Edition.*)

The arguments adduced in support of this opinion, are not very convincing. Indeed, unless the question be assumed, it is difficult to discover that the increased appetite and frequent cravings are more in proof of this opinion, than of the very opposite. As far as the stomach is concerned, the process of digestion seems regularly and rapidly performed; hence, that organ cannot be considered as primarily diseased. The symptoms first noticed by the patients, are not such as to lead us to suspect any morbid state of the stomach, and, in many instances, those mentioned by Dr Rollo, are wholly wanting. All writers seem to coincide in saying, that there is some morbid state of the stomach, some imperfect assimilation of the food taken in. But this is no explanation—it is only the expression of a fact—it is only saying that some imperfection takes place in a process confessedly unknown: it does not lead us to the ultimate object of our inquiry, nor remove the difficulty in accounting for the phenomena. There is, according to Dr Rollo, a sugar-making process going on in the stomach; and, according to *Messrs Nicolas & Gueudeville*, the fluids of the stomach, liver and pancreas, are changed by the presence of ill-formed chyle. These suppositions are perfectly gratuitous. If sugar is formed in the stomach, it must be from the alimentary matter undergoing the fermentative process; but the experiments of Spallanzani sufficiently prove, that no fermentation takes place in healthy digestion, and we have no marks of this process in diabetes. Supposing saccharine matter to be formed in the process of digestion, it must be contained in the blood; and numerous experiments have been made to detect it, but without success. Dr Dobson is the only one who found the serum '*rather sweetish.*' This must be considered as accidental, especially as numerous recent trials have found the taste of the serum saline, and the other parts perfectly natural. It may be said, that saccharine matter exists in the blood, so combined as to escape any tests employed to detect it.

Such an objection cannot be obviated by reasoning : it must be left to future discoveries. Those who attribute the primary cause of diabetes to a morbid state of the assimilating organs, look upon the kidneys merely as filters, designed to separate and carry off the excrementitious part of the blood. But this is contradicted by a due attention to the glandular structure of these organs, their complex formation, and, above all, by substances being found in the urine, which have never been detected in the blood or any other part. Modern chemistry has shewn that the elements of sugar are contained in the chyle ; but it is not so satisfactorily ascertained, that saccharine matter, already formed, exists in this fluid. The different secretions are so mutually dependent on each other, and so various and intricate are the several processes through which they all pass, that it seems unfair to attribute to one process, what may be the result of several. Carbon, oxygen, and hydrogen, exist in sufficient abundance in the animal body ; by their combination, they may be supposed readily to furnish that peculiar sweetness to the urine. Dr Lubbock has conjectured that the suppression of the perspiration which is very remarkable in this disease, may conduce to the combination of the elementary principles of sugar. This supposition is recommended by its ingenuity, but it requires to be determined by more accurate experiments. The same want of experiments, makes us sceptical with regard to the supposed altered state of the other secretions of the body.

The next assertion to be examined, is, that the quantity of urine evacuated is in excess, in consequence of the suppression of the other excretions. Hitherto, there has been no cause pointed out, why the quantity of urine discharged, should exceed the liquid ingesta ; and the reason now alleged is a very poor one. On this subject, we cannot help again referring to the very acute and ingenious observations of Dr Lubbock, who first detected and pointed out a very popular error in the history of this disease *. In all those cases, where the quantity of liquid ingesta has been accurately measured and faithfully recorded, it has almost invariably been found to correspond with the quantity of urine discharged. Any little excess may, in general, be readily accounted for, by considering the proportion of solid ingesta converted into a fluid state. In some instances, we know that the urine has appeared to exceed the quantity both of liquid and solid ingesta ; but, in these cases, it has at length been discovered, that the patients were often guilty of irregularity in their diet, and that the account of their actions could not be depended

* *Vide Medical and Physical Journal, Vol. V.*

pended upon. That the quantity of urine is in exact ratio to the fluids taken into the stomach, is a fact of considerable importance ; and, if well established, of which there seems now little doubt, it will at once set aside any frivolous and trifling discussion concerning the origin of the supposed superabundant water. The marvellous relations which are met with in old authors, may be placed on the same shelf with the histories of surprising cures by the royal touch, and 'such forgotten things.' In making further inquiries on this subject, there is one source of fallacy to be guarded against, which deserves to be pointed out. If the medical attendant wish to know, in any case, what relation the urine and the drink bear to each other, they request the patient to attend particularly to this circumstance, perhaps for twenty-four hours. In consequence of his attention being directed to the *ingesta*, he probably takes less both of solids and fluids ; hence a disproportion appears, by no means usual, especially if the *ingesta* taken previous to the experiment be overlooked. In hospital practice, great caution is requisite in drawing any conclusion ; so numerous are the sources of error.

The seventh and eighth articles of the summary are the most original, and, if fully established, the most important of the whole. From the analysis of diabetic urine, conducted with great attention, and the result of every experiment compared with healthy urine, Messrs Nicolas and Gueudeville have drawn the following inferences : 1st, That diabetic urine contains none of that peculiar matter called *urée*, no uric or benzoic acids, and a very small quantity of phosphoric salts : 2^{dly}, That it passes readily into a state of fermentation, and contains a large quantity of a peculiar saccharine matter, the nature of which is not yet rightly understood.

It is much to be regretted that our authors have omitted to mention, whether the urine they examined was from one diabetic patient only, or from several ; because the usual ingredients of urine, and the relative proportion of them, vary considerably in different persons, and even in the same person, at different times. The result of these experiments seems to show, that *urée* was in very minute quantity, if not wholly deficient in diabetic urine. The presence of saccharine matter, and the very diluted state in which all the salts are found, when urine is secreted in great abundance, renders it difficult to detect these substances by the usual tests. Hence, a small portion of *urée* might exist, sufficient to give that peculiar colour and unpleasant smell to alcohol, as was observed, without being so considerable as to be detected by crystallization and by the nitric acid. We are inclined to make this supposition,

because the experiments which we have made, and, still more, the numerous and repeated trials made by several of our friends, authorise a very different conclusion. In all these experiments made on diabetic urine from different patients, and at different periods, *urée* has always been detected, and likewise all the substances common to healthy urine, only in less proportion. The small quantity of phosphoric salts may readily be accounted for, in considering the quantity of fluids taken in and discharged. To question the accuracy of these experiments made by a Professor of chemistry and a learned physician, may be deemed bold and presumptuous ; but if the authority of great names be necessary to give countenance and credit to any assertion, we could adduce the testimony of a Professor of chemistry, and even of two Professors, in support of what has been just stated. At any rate, it is impossible to build a legitimate theory of diabetes on the deficiency of *urée*: 1st, because there are numerous instances of the urine containing *urée* along with saccharine matter ; and, 2^{dly}, because there is one species of the disease, where saccharine matter, as well as *urée*, are almost wholly deficient in the urine. It happens unfortunately for this theory, that the urine in this complaint exists in such opposite states : sometimes it abounds with saccharine matter ; at other times, this sweetness cannot be detected, while, at the same time, the affinity between these different states is so great, that they pass into each other suddenly, or by insensible degrees. This variation in the taste, colour, and smell of urine, occurs very remarkably in the same patient, when the system is deranged by any febrile attack. In framing explanations of the proximate cause of diabetes, authors, in general, seem to have directed their attention solely to the saccharine qualities of the urine, and to have overlooked entirely that species in which the chemical qualities of the urine are quite opposite. The existence of *diabetes insipidus* is a fact which cannot be doubted. Now, the nature of this latter complaint, and the result of numberless trials with animal diet, show that the qualities of the urine may be very little altered, its quantity reduced to the healthy standard, and yet the emaciation and dryness of the skin continue, and the patient fall a victim to the disease. Hence the axiom which is here laid down, that the return of the *urée* and phosphoric and muriatic salts is a proof of the cure being accomplished, cannot be deemed of any great weight.

In conformity to their ideas of the causes of diabetes, Messrs Nicolas and Gueudeville have proposed their method of cure :— to remove the spasmodic affection, and to afford the principle of animalization to the system. The means employed to fulfil these indications, were not such as practitioners in this country would place

place much confidence in. Animal diet, phosphate of soda, phosphoric acid in dozes of eight and ten drops, the watery extract of opium, musk, bark, ammonia, and frictions with lard and oily liniments, were the remedies employed in the four cases which are detailed ; and in one case, a gentle bleeding preceded this course of treatment. What was formerly called, amongst us, *deoxygenating the system*, these writers term *azotizing*, which seemed to bear the interpretation of killing the patients ; but, to our great astonishment, three out of the four are said to have been cured in a very short time ! — Experience has shown, that the exclusive use of animal food is the best and quickest mode of relieving the most urgent symptoms of the disease ; and, in some cases, a permanent cure has been effected by this regimen alone. But it would be an unprofitable task to enumerate the numerous and opposite remedies which have been at one time extolled, and then condemned. The uncertainty which prevails with regard to the causes, has left a wide field open to experiment in the cure ; and it is to be feared, that much progress will not be made in the one, till our knowledge of the other has been greatly increased. It is true, the pathology of diabetes has not been illustrated, as *a priori* might have been expected, by examining appearances after death. No decisive and characteristic morbid changes have been discovered, though there is no reason for regretting, with our authors, that so few cases of dissection are on record.

Before concluding this article, we ought not to omit mentioning, that frequent sarcasms are cast on Dr Rollo in different parts of the present memoir, for not giving the merit of certain opinions and modes of practice to the original inventors. Thus, it is said, that animal diet was employed by all the old physicians, while it is forgotten, that an exclusive employment of this diet was the only novelty in Dr Rollo's practice. He is accused of plagiarism in several other particulars. But let us hear these advocates for rendering honour unto those to whom honour is due, (or, as they describe themselves, '*admirateurs des anciens autant qu'apôtres zélés des découvertes modernes*', p. 33.), involving themselves in the very crime which they so severely condemn. In p. 13. they assert, that Dr Rollo has founded his doctrine on pneumatic chemistry, for which Europe is indebted to France ! Again, in p. 37. we are told, that Dr Rollo is indebted to Fourcroy for the notes which embellish his work ; and the author of the '*Système des connaissances chimiques*', is mentioned as the first person who pointed out the difference between sugar and gum, by experiments made on the germination of seeds. It is scarcely to be imagined, that neither of these gentlemen ever read more than

than the three first chapters of Dr Rollo's publication, which they have criticised so severely ; and yet it must be owing to such a cause, or something worse, that they have entirely omitted to refer to the valuable experiments of Mr Cruickshank. The name of this celebrated chemist is only mentioned once, and then quite unnecessarily. We have candour enough to impute this omission to its true cause; and can only say, that Messrs Nicolas and Gueudeville have executed this part of their work in the true spirit and genius of their countrymen.

It is not our intention to multiply objections, or to enlarge farther upon this subject. The general merit of this memoir cannot, upon the whole, be rated very high. It resembles a common-place book, in which most of the remarkable facts relating to diabetes are registered. This may serve to amuse a philosophical society, or to answer the ends of a theorist ; but it is not enough for those engaged in practice, who examine strictly every new proposal, and think, as they ought, for themselves. These authors seem actuated by an excessive love of theory, and a disposition to grasp at general principles, without a previous knowledge of particular facts. This rash mode of generalizing is too frequently adopted in medical inquiries. It is the most fatal obstacle to all real improvement, and cannot be too much condemned. It is worse than a false hypothesis, because it extends farther ; and, by habituating the mind to mere terms, it may lead us to mistake new words for real knowledge.

ART. XV. Progress of Maritime Discovery, from the earliest Period to the Close of the Eighteenth Century, forming an extensive System of Hydrography. By James Stavier Clarke, F. R. S. domestic Chaplain to the Prince, and Vicar of Preston. Vol. I. 4to. Cadell & Davies. 1803.

WHEN we first launched out into this immense volume, we had not cruized a great way beyond the Table of Contents, before we found ourselves totally out of our reckoning, and utterly unable to determine where we were going. We were obliged, therefore, to anchor in no very pleasant station, till we could ascertain the course which it would be proper for us to pursue, and the nature of the doubtful element into which we had ventured. The title of this work is, ‘*The Progress of Maritime Discovery* ;’ from which we concluded, with unwary precipitation, that it was a history of the successive events by which those regions of the globe, separated by the sea, first became known to one another. Thus far all was clearly determined, and intelligible. But the second

second clause of the title, ‘ forming an extensive System of Hydrography,’ involved us in difficulties which the perusal of the whole work has not removed. In humble dependence on the authors of dictionaries, we had always understood by this term, a minute description of the seas, lakes, rivers, and other collections of waters which form the aqueous part of the globe, including all the information on these subjects which a pilot requires in the practice of navigation. Nor were we able to foresee how an extensive system of that species of knowledge could be given in a history of maritime discoveries. To have supposed that the author would exalt every successive improvement on a sea-chart to the dignity of a maritime discovery, would have been doing him great injustice. For, instead of ennobling common events by the dignity of his language, we have often found him reducing, by the same instrument, the greatest achievements of mankind to the level of ordinary occurrences. In these doubtful circumstances, we could not help entertaining some apprehensions for the glory of a work in which the interest and literature of the first commercial nation in Europe appeared to be equally concerned. Our fears have not been groundless. After promising every thing, all remains unaccomplished; and in the following observations, we are afraid that the tone of censure will not be very frequently relieved by pleasing intervals of praise.

After a dedication to the Prince of Wales, in which he is reminded of his relationship to the Black Prince and the Duke of Clarence, we are presented with a Preface, in which, after a sketch of the contents of his work, we find an account of the rise and progres of the motives which led Mr Clarke to this great undertaking. Such of our readers as have not seen his Prospektus, we beg leave to inform, in his own words, that

—‘ the outline of the plan was projected under the auspices and approbation of Earl Spencer, who presided at the Board of Admiralty; but that he did not then mention another patron, by whom the arrangement of the whole was formed, that zealous mariner Admiral John Willet Payne.

‘ Under this eminent officer, my attention was first directed to naval literature. His ardent mind pointed out whatever of novelty or of utility had hitherto been neglected; and whilst his genius cast new light on the desiderata thus presented, his conversation cheered my fatigues, and his enthusiasm prolonged my industry.

‘ On my return from a cruize in the Impetueux, my first * efforts were submitted to the press, and favourably received. When I contemplated

* Sermons on the Character and Professional Duties of Mariners; with the first, second, and third volumes of the Naval Chronicle.

templated the next object that offered, I trembled at its magnitude : My professional duties were increased ; and I felt that I not only wanted the ability, but the leisure requisite to complete an undertaking so great as the progress of Maritime Discovery from the earliest period to the close of the eighteenth century. Whilst I hesitated, the importunity of friendship increased, and at last prevailed. It repeatedly urged, that a complete System of Hydrography was wanted by the literary world, and particularly by naval men ; that it would prove an essential service to future navigators to have the principal discoveries of their predecessors connected and arranged ; that a perusal of the numerous works relative to this subject, demanded rather the leisure of a recluse, than the agitated and interrupted day which the mariner constantly experiences.' Pref. p. viii.

A long catalogue of patrons and assistants, who lessened, by their suggestions and remarks, the labours which friendship had urged him to encounter, follows this information. Of these, seventeen in number, we would remark in particular the Reverend Mr Bowles, from whom the writer ' experienced attention—though only known to him by the courtesy of literature.' The list closes, in a very emphatic manner, with an acknowledgment of the great assistance he has ' invariably obtained from the liberality and bibliographic information of that truly respectable and honest bookseller Mr Thomas Payne.'

' To the first of these gentlemen, the author owes no ordinary obligations. He is indebted to him for a vast number of poetical mottoes, one of which, along with an elegant *vignette* from the antique, embellishes the commencement of almost every section in the volume. These *vignettes*, and a number of maps and engravings, might insure celebrity to any literary performance, if the delight of the eye could supersede the claims of the understanding, and atone for the absence of the primary qualities of genius. Yet we cannot recollect that *Herodotus*, who first transmitted to posterity the exploits of the earliest and bravest nations of antiquity, without any model before him, but nature and sound judgment ; or *Livy*, who arranged the voluminous history of the greatest empire in the world ; or *Hume*, who performed for Britain as a kingdom, what Mr Clarke owed to her as a maritime power ; or *Robertson*, who embellished, with elegance, reason, and philosophy, the greatest naval discovery in the annals of time—ever condescended to strengthen their claim to immortality by the borrowed assistance of the pencil or the graver.

The author having referred Locke's catalogue of voyages and travels for the Appendix, enumerates in his Preface, with great bibliographical importance, the other compilers of collections. These are in number twenty-five, from *Grynaeus* to *De la Harpe.*

‘ In all of these collections, though in Astley’s least of any, Hydrography has been considered in a secondary, and frequently in a subordinate point of view. The great objects of this branch of science, so interesting to a great commercial nation, and so important to its navigators, are dispersed through an infinity of volumes, and often erroneously give authorities which have seldom been cited; the claims of nations and individuals to the merit of their respective discoveries, are too faintly traced; the remarks of the navigator and traveller, united in the same work, destroy that connexion and arrangement each might separately possess; the dissertations and remarks of nautical men have multiplied, until some of the earliest and most valuable are nearly lost amidst the mass of information that exists; so that it appeared necessary, at the close of the eighteenth century, to arrange and separate the stores which preceding ones had afforded; and thus to form a general system of Hydrography, equally interesting to the navigator, the statesman, the merchant, and to readers in general.’ P. xviii.

After having sketched the outline of his plan, our author informs us, that, ‘ notwithstanding the number of volumes marshalled in dreadful array’ before him, he conceives it may be executed in about six, or at least seven thick quartos. The first of these is the volume before us, containing no less than 1019 pages, of which 230 contain an Introduction, called ‘ a Historical Memoir of Ancient Maritime Discoveries.’ It reviews, in four sections, the *earliest*, the *Scired*, the *Grecian*, and, last of all, the *Carthaginian* and *Roman* periods. The first book of the history follows in three chapters, each divided into two sections. It begins with what the author terms ‘ the commencement of the liberties of Europe,’ an event placed by him in the year of God 1422; and ends with the discovery of the Cape of Good Hope by Da Gama, May 20. 1498.

In reviewing the earliest periods of human affairs, the strength of a historian who writes for posterity, encounters a severe and decisive probation. As the facts are scanty and obscure, so the authors from whom they are gathered can neither communicate method, nor lend embellishment to his narrative. In ages long usurped by fiction, over which truth surrendered her authority many centuries before the birth of history, we grant no ordinary honour to the hero who successfully revives her cause, and rears in those abandoned regions the standard of her ancient government. But in proportion to the gratitude with which we regard the true recoverer of perished knowledge, is the disappointment excited by those who impose on themselves and the world with imaginary pretensions. The antiquary, who sweeps from the earth, like a cobweb, all the remains of ancient history, may well be accused of a greater propensity to scepticism than to common sense. He who patronises this work of destruction, merely to raise on its ruins

reins the flimsy edifice of his own imagination, forfeits the title of visionary, to gain a less honourable appellation. But he who believes implicitly in all that such theorists have asserted, and propagates the cheat after it is already notorious, merits a distinguished place in that empty paradise which Milton assigns to all that is false and transitory. This sentence is just, and amply deserved, when we consider the importance of historical research into those periods which comprehend the formation of kingdoms, the origin of useful discoveries, or any of those great revolutions of affairs which concern the welfare of posterity.

The writer of this introductory inquiry is liable to these and similar charges, in no inconsiderable degree. His title, which is injudiciously chosen, confines him within limits of which he has felt the constraint, but transgressed as often as convenience required. It fixed him to ancient maritime discoveries as the sole object of his attention, without the liberty of digressing into the history of nations, further than was necessary to illustrate his plan. With that imbecility of judgement which distinguishes the weak from the able historian, he appears to have considered three related, but distinct topics, *maritime discovery*, *navigation*, and *hydrography*, as one and the same object. The mistake involves him in disorder and perplexity, which are only exceeded by his mode of illustration, rendering the introduction to the principal work a dreary entrance, in which we linger for the promised light, in a wilderness of obscurity.

The subject of the vignette which embellishes the first page of this dissertation, is a medal of the Emperor Philip, struck at Apamea in Phrygia. The reverse of the coin bears a figure of the Ark, with those of Noah and part of his family. Above their heads, is the dove holding the olive branch. The word ΝΟΕ is inscribed on the side of the vessel. The reason of its appearance here, is an idle opinion that the memory of the Ark and Deluge was preserved in Apamea from the earliest age to the days of Philip the Elder. Not to mention the influence of Christianity in Phrygia at that period, nor the suspicion of forgery under which the medal labours, it is very singular that the word *Kibotus*, the ancient name of the town, should be reckoned sufficient authority for a story so improbable.

The author begins with a violent invective against the fancies of those who derive navigation from the nautilus; and against the Phrygian historian, Sanchoniathon, for asserting that the first canoe was formed in his own country, of a tree accidentally hollowed by fire. Mr Clarke recalls such visionaries to the true prototype of navigation, the Ark of Noah; and upbraids them unmercifully

unmercifully for consigning the three-forked trident,* the *insignia* of the *triads* of God, into the hands of Neptune. With one dash of the pen, he annihilates the mythology of ancient Greece; and Bryant, the venerable patriarch of *analysis*, who has united all the mysteries of ancient fable in a sphinx of his own creation, appears upon the stage. The author, scarcely embarked on the tide of time, consigns himself at once to the care of these three infallible pilots, Jacob Bryant, Mr Maurice, and Captain Witford. He is not contented with borrowing their ideas only, but makes free with their words, through many long pages of grateful plagiarism. So mechanically is his little bark towed along by these first-rates of *antiquarianism*, that she follows, without any exertion but what is necessary to attach her to a new guide and conductor, when the course of the preceding one is verging to an end. For Mr Clarke trembles to hear the sound of his own voice, ‘lest the nervous language of Mr Bryant should be impaired by the interpolations of an inferior writer! ’

The eulogia of the heroes being finished, the historian enters on the state of *astronomy before the flood!* The opinions of M. Bailli and Maurice, who ascribe to the antediluvians the Clepsydra pendulum and Mariners compass, are very respectfully enumerated. Then Jubal, and Jabal, and Tubal-Cain, who were the Apollos of Greece, the Krishna of India, &c. &c. &c. are introduced. Fire-arms, says our sage historian, on the authority of Maurice, are shadowed out in the fiery darts of the deified Indian rajahs. He learns from the institutes of Menu, that the Hindoo nation was early engaged in distant commercial expeditions by sea; and, from similar sources, that naval architecture was well known to the ancestors of Noah. Yet he wisely hesitates, for a special reason, to join in opinion with the fore-mentioned authors concerning the magnet. He thinks that it was a gift of Noah to his posterity; that it assisted him, *under Providence*, to regain the happy Chaldean regions from which he had sailed; but that, even supposing the magnet to be unknown, the long lives of the first race of men might probably have led them to the invention of so simple an instrument as the marine astrolabe. The reason for dissenting from Bailli and Maurice is curious, as it points out the unhappy consequences of attempting to reason, in those who are unqualified by nature for the task.

‘This (the invention of the compass) would argue a skill in science, among the antediluvians, sufficient to have counteracted or opposed the overwhelming chastisement of the Deluge; and it is rational to conjecture, that if mankind had then possessed a knowledge of the magnet, or had attained to any perfection in the science of naval architecture,

the

* This is an absurd term, derived from Hindoo fables.

the more powerful and pervading operation of fire would have been called from its volcanic prisons, and poured forth upon the globe.' (p. ix.)

We, who repose with no less reverence than Mr Clarke in a belief of Divine Providence, and the unerring certainty of its measures, cannot agree with him that the needle of a mariner's compass, or the skill of a carpenter, could have altered its decrees. Unless the antediluvians had possessed a fleet like the British navy, and been able to foresee the event, and secure abundance of provisions; unless they had possessed skill to defy the winds, combined in destruction with the waters, at the *fiat* of God, and the still more formidable dangers of the rocks on the tops of the mountains, where they might, at least during one period of the Deluge, have been shattered and destroyed—we could not have allowed the probability of their escaping. On occasions of smaller moment, He confounded the language of mankind, and divided rivers and seas: And are these actions of easier performance than confounding the polarity of a magnet?

When he ceases to reason, our historian returns to copy. Along with Mr Bryant he finds, in 'the awful and mysterious Thebath (the ark), a vessel without oars, rudder, or anchor, the origin of naval architecture.' He comments on its materials, the Gophir wood, which he says the LXX call *square timbers*: then on its dimensions, and form. According to him,

—' this astonishing vessel was divided into three *stories* or *decks*; a door or *entering port* was cut in the side; and one large window, with probably many *scuttles*, were so placed as to give light and air with the greatest advantage and security: the whole was then paid, both within and without, with a thick coat of pitch or Asiatic bitumen.'

He adds, with great *naïveté*, that one Peter Janson a Dutchman, and, to use his one phrase, by profession a Ménonist, built a vessel of this description; and that whilst it was building

—' he and his ship were made the sport of the seamen. But, afterwards' (continues he) ' it was discovered that ships built in this manner were, in time of peace, beyond all others most commodious for commerce, because they would hold a third part more, without any addition of hands.'

On this, we also beg leave to suggest an improvement to our naval historian. Is it not evident that a ship built like the ark, without oars, sails, rudder, or anchor, is equipped either for perpetual rest or motion—a convenience which even the finest first-rates seldom possess? Is it not clear, that, having no oars to ply, nor sails to handle, she actually requires no hands at all? On the contrary, their weight may be better supplied by a suitable portion of cargo; all the occupation of the people aboard being simply, in fair weather, to clear the *scuttles*, or amuse themselves by looking out from the great *window* of the ship.

Our readers would derive little information from our author's minute account of the awful cruise which the Tasker made from the plains of Chaldea to the mountain of Ararat ; nor from a long dissertation, in obsolete English, by Raleigh, followed by another full of disgusting and palpable fables by Wilford, on the situation of that mountain. The one may be found in Hakluyt's Collection of Voyages, the other in the sixth volume of the Asiatic Researches. We promise them better amusement in the history of the dispersion, which he copies *verbatim* from Mr Bryant.

After the immense horror and astonishment which struck our historian on viewing 'the face of deluge,' he pursues the *Arates*, a dignified and appropriate name for the family of Noah, down to the plains of Shinar, whence he disperses them over the globe. The Egyptians and Phenicians, or Canaanites, he is pleased (after Bryant) to call Amonians, because they were the children of Ham. Of Japhet and his posterity we receive no account. They were probably little skilled of old in naval affairs. But the sons of Cush, whom he terms Cuthites, filled many parts of the world ; they were a bold adventurous race, who, roaming on sea towards the Straits of Gibraltar, raised pillars, on the top of which was a fire, on all the principal headlands, to direct their perilous voyages ; and these pillars were the first lighthouses.

Profound oriental scholars (but still profounder physiognomists) have recognised the mild and amiable character of the posterity of Shem in the submissive and humane disposition of the Indians. 'Mr Wilford (we are told) has been enabled to discover some traces of their history in the ancient books of the Hindoos ; but these traces are faint, and almost lost, in the greater glory of the Amonians.' The fiercest part of the descendants of Shem, the *Palli* or shepherds, carrying with them their sacred books, the four *Vedas*, emigrated into Egypt, Abyssinia, and Azania. They were, however, preceded by Cush, who was the original leader of those adventurers who first attempted the sea. His son Nimrod, an arch-rebel, led these Cuthites, Titans or giants, against the posterity of Assur settled in the plains of Babylon. His troops were dispersed in the engagement ; and the flight of their chief towards the Red-sea is recorded by the Greeks in their legends of Bacchus. After this defeat, one remnant of the Cuthites peopled *Cal-abus* (Colchis near the Eusine,) while another division took possession of the country around Calcutta in India ; *sic illiterat Calcutta*.

Bes of all the Noachites, the Anakim, Titans, and Scyths deserve most attention. The fierce and ambitious Titans, so called from their worship of the sun, are mentioned as the

builders of the Tower of Babel, which Mr Bryant thinks was a *tuphon* or temple of that deity. The Scythæ and Cuthites, who were the same nation, extended in colonies from Egypt to Thrace. In the latter country settled likewise a division of the Amonians along the Danube, Da-nau, or Da-naus, the river of Noah! The Cuthite colony, which fixed its residence in the Indian region Colchis, had also the advantage of a *pearl* fishery: and indeed all the gems of the ancients received their names from the Cuthite or Amonian language. Paralia is not, as translators have ignorantly supposed, a maritime country, but the land of pearls. In proof of which things, Mr Bryant offers, in blank verse, seventy beautiful lines, his own version of Dionysius Periegeticus, who dwells on those founders of cities and mighty states, and shewers of the path through seas unknown, with great rapture and veneration.

Sea-charts, we are then told, were first engraved on pillars by the Cuthites in Colchis and Egypt. The temples of Caneph, Proteus, Phanes, and Canobus, were only sea-beacons. Pompey's pillar was originally one of these; for the oracle of Ham was called *Omphi*, and, when spoken of as 'the oracle, *P'omphi* and *P'ompi*.' These sacred maritime temples were built by the Amonians on the very coast. Their figure is minutely described by our historian, and delineated in a vignette (p. cl.), which is intended for those of Byrsa, the citadel of Carthage. It appears, moreover, from his reasoning, or rather that of Bryant, that the whole world has been long grossly imposed on by the fables of the Greeks, who have filled their pages with the wildest fictions and errors. Most of the renowned *heroes* of antiquity were, in reality, nothing but large *lighthouses*. For the Amonian firebeacons, placed on a round eminence, were called Tith; and such a beacon was *Tith-onus*, the husband of Aurora, so famous for his longevity. Thetis, the sea-goddess, was a fire-tower near the ocean, called Tith-is. Chiron is Chir-on, the tower of the sun; and the Centaurs, viz. Cahen-taur, was a marine college near Nephele in Thessaly, in which Achilles and other young gentlemen received a Chironian education. Castor was both a temple and a pharos; while Cerberus was properly Kir-abor, the place of the sun, alias Tor-caph-el, from which the fabulous ancients formed *μυστηρια*, and foolishly pretended that he had three heads.

Minos, however, the celebrated legislator, was not a *beacon* of this description, but the lunar god Neua, equal to Noas or Noah. He had a cruel temple in Crete, called Men-tor, where strangers were sacrificed, after being obliged to wrestle or box, in the arena before it, with an athletic priest (probably a common tar)

tar) trained to the exercise, and skilled in the work of death!— ‘The Lestrygones, the Lamiae, and Cyclopeans, were dispersed, with the like cruel disposition, throughout Greece, Pontus, and Libya. The furies, or *furiæ*, and the harpies, were originally those priests (we should read priestesses) of fire, whose cruelties became so enormous that they themselves were at length enrolled with *demons*.’

Such is the plan on which our historian and Bryant analyse the mythology of Greece, and write the history of naval discovery. It is simple and obvious. Change every great king (as for instance Sesostris, pp. lx—lxiii.) into a nation; every great hero (*ut supra*) into a lighthouse; and every goddess into a priestess of fire, by the effulgence of these luminous bodies you may travel in safety through the night of antiquity, and ‘lead a new impulse to the literary world.’

If the dignity of the subject would admit either of humour or digression; we think that a very agreeable compendium of modern discovery might be executed on this plan of Mr Clarke. With some assistance from Dr Swift, in the manner and etymology, a British admiral might be changed into a kingdom; each of his heroic tars into a lighthouse; while priestesses of fire might readily be found in many of the principal ports of the realm.

But, though heartily weary of the task, we proceed with the Introduction, of which there remain to be dispatched no fewer than 130 pages. These comprehend, in the next place, our author’s sage opinion, that America was the Atlantis of Plato! Egypt, Phenicia, Judæa, Ophir, and Tarshish, then pass in review. An enormous pile of indecisive conjectures is substituted for their naval history. We only learn, with regard to the first of these, that the Cynocephali were not men with dogs heads, as the ancients report, or *apes*, as the moderns believe with abundance of reason; but the *Cabri-caph-el*, priests of the rock of Orus, the royal Astronomical Seminary in Upper Egypt. ‘The Cynocephali,’ says he, ‘were, in fact, members of a sacred college, whose professors were persons of great learning, particularly conversant in astronomical observations; they were not only established in Egypt, but likewise in India and other parts of the world.’ For more information concerning these wise, but silent philosophers, we refer our readers to the writings of Dr Swift.

In the midst of all this learning, the naval history of Phenicia is almost entirely neglected. If any abler hand shall ever undertake a subject that really appears far above the abilities of Mr Clarke, this forgotten district of Palestine will undoubtedly ap-

pear as the first and central point of maritime discovery. We hesitate not to affirm, that there is not a passage in ancient history, which affords the smallest reason to believe that naval architecture was modelled from the ark. On the contrary, the story of the canoe, formed accidentally by fire in the Phenician woods, as confirmed by the state of navigation in all savage countries, is simple, and agreeable to reason;—a portion of the ancient history of a people who would have gloried in concealing the humble origin of their navy. But Mr Clarke, who is so luminous in his description of the ark, passes over, in contemptuous silence, the intermediate progress of naval architecture. For the model of a machine, which man was to govern in the waters, absurdity herself would scarcely have fixed on his prototype. The Sidonians wrought on principles of a different nature. They hollowed the cedar on Libanus, and launched it on their fishy shores, to aid their daily endeavours to procure a miserable subsistence. Their country, in all respects destitute of riches, was called by themselves SIDON, the *fishery*. In the slow course of improvement they fixed the oars to the sides of the canoe; and at length spread the fleet on a pole raised in the middle. For the first time they invoked * Melcartha to assemble the winds. Having left their nets, they cautiously steered towards other shores, at a perilous distance from their native coast. They transferred to their ships a small portion of the load which had hitherto burdened their camels. They constructed vessels of different forms, with two or three banks of oars and several masts. Those intended for commerce were called GOLIM, or *Gauda*; their hull was round, deep, and heavy: those designed for expedition or war (for hostility now ventured on another element), were long, light, and adapted to enterprise.

By the fleet which they gradually created, the Phenicians rendered their mariners princes, and the barren rock of Tyre the emporium of the world. Of all the nations which have braved the deep, none have made a greater progress in naval architecture, discovered more regions of the earth, or conferred on them greater benefits. To the west their navies visited Cyprus, Crete, Italy, Spain, Gaul, and the British islands; their colonies founded an empire in Africa; to the south they navigated beyond the straits of Babelmandel, along the shores of Zanguebar, and perhaps around the continent. The Greeks received from them their first ideas of naval affairs, and the form of the ARGO, or long

* Melcartha, the King of the city; a name of Baal or Hercules, whose image was placed on the stern of their ships.

long ship. The origin of the Roman from the Carthaginian navy is sufficiently known; and those of the Portuguese from the caravels of the Italian states. Thus the Phenician history embraces the whole rise and progress of discovery, and of navigation itself. Mr Clarke, contented with the figure of the ark, leaves their merits to oblivion, and retails only what he could pillage from every common author.

Having piled up an immense farrago of opinions respecting Tarshish and Ophir, and wisely allowed the reader to judge both for the historian and himself, he descends slowly into the regions of truth and probability. Mr Bryant expires with the Argonautic expedition, the last fable which remained to be outdone. Gosselin and Vincent succeed him; the *Recherches* of the first, he calls a learned and valuable, though in some measure an erroneous work. When compared with the infallible Bryant, we acknowledge the charge: but, by his friendly assistance, Mr Clarke fills up many pages on the naval expeditions of Greece; as, by the help of Vincent, he garbles the celebrated *Periplus of Nearchus*. In the fourth section, the naval history of Carthage is treated in a dull and prolix manner. As the mother state had been superficially examined, the colony could not look for a better fate. After a few unfortunate battles and negotiations, the Queen of Africa perishes, at the fiat of Cato, in the flames of her native city. Having viewed, with some emotion, the enterprising character of Hanno, and Punic navigation, he then crosses the Mediterranean, bound for Italy. The Roman commerce in Egypt, Africa, and India, till the Gothic invasion of the empire, next occupies his attention; and at this point the Introduction closes its dreary expedition through the tempests of antiquity.

The greatest part of our labours should now commence with the principal work, if we thought it at all necessary to lay the contents of it before the public. The facts, however, though sufficiently important, are in general familiar, and we feel that neither the method nor the illustrations deserve any particular notice. We have met with no brilliant passages, nor profound observations to extract; no comprehensive views of human affairs, ably formed, and beautifully executed.

In Chap. I. Mr Clarke begins to examine modern naval and commercial history from the reign of Charles VII. of France, A. 1422, which he and Voltaire assign as the era of the liberties of Europe. The trade of Constantinople, Genoa, and Venice, is described. He glances at the Alexandrian commerce of the last of these states; but, weary of composing, inserts a long passage, in obsolete English, from Hakluyt's *Voyages*. Florence and

the Medici are discussed in a style of lofty declamation, which is the more amusing, as it appears after a cento extracted, in every state of language, from every author which Mr Clarke had inspected. When he ceases to mangle the carcases of the slain, and the body is exhausted, he spreads his wing for a few moments, like a fowl of the noblest pinion, only to disappoint our hopes, by a precipitate descent on another field of slaughter.

'The inhabitants of Florence, continually viewing an expanse of water whose boundaries were ascertained, on which the gigantic billow and mountainous swell of the ocean were seldom if ever seen, enjoyed no incentive to the spirit of discovery, no object adapted to create that train of searching doubt and bold conjecture, which the boundless sweep of the Atlantic so much tended to encourage in the mind of Henry Duke of Viseo.' p. 20.

After the Italian states, the Netherlands, Hanseatic league, France, England and Spain are introduced. An attempt is made to delineate the state of European commerce in the fifteenth century. But the portrait is extremely and necessarily rude, owing to the heterogeneous nature of the materials. Our author's performance, indeed, is made up, throughout, of pieces from every writer whose works have been so unfortunate as to fall into his hands; and, instead of possessing the beauty and stability of original workmanship, resembles an Arab's hut plastered with mud, but built with the fragments and pillars of the temple of the Sun.

In Chap. I. § 2. we find the maritime history of Portugal from the origin of that kingdom to the reign of John I., with copious extracts from the narratives respecting India, Tartary, China, and Javan, with which Marco Polo and his brethren excited its spirit of discovery. A curious list of writers on Portuguese history is subjoined.

Chap. II. proceeds with the discoveries in the West of Africa, under John I., Edward, Alphonso V., and John II. How adventurous the voyagers were that led the way to the circumnavigation of the Cape, is sufficiently known: that they are recorded in this volume with so little elegance, is matter of the deepest regret. In the end of this chapter, we find about eighteen or twenty pages occupied by the hydrography, properly so called, of the Atlantic Ocean. A few remarks on that subject, with practical directions for doubling the Cap^e of Good Hope, are the first atonement which the author makes to his readers, for withholding from them so long the promised system of hydrography. And, to render the atonement still more satisfactory, he breaks, on account of it, the chronology of his work, by giving instructions how to sail round a promontory, as yet undiscovered, and unknown to his readers!

Chap. III. § 1. makes no progress in the principal narrative, but exhibits a retrospect of Indian history from the Macedonian discovery to the close of the fifteenth century. This mighty episode rises very awkwardly out of the subject. Alexander entered that country by land: its subsequent dynasties and revolutions have no connexion with maritime affairs; and though a rapid view of them might have illustrated the Portuguese discovery, yet it ought not to have occupied so many pages, in a work to which it bears so distant a relation. A frivolous paragraph about the mariner's compass and magnet, which he supposes to be mentioned in Scripture, 1 Kings x. 11, is suitably followed up by a dissertation on the Indian origin of the *fleur de lis* on the needle. All this is in order: the historian of navigation, who did not think it worth while to inquire who first invented the oar and the sail, (discoveries nearly as important as that of a ship itself), was likely to bend his whole industry to assign a fanciful and improbable origin to a trivial ornament. We say fanciful; for the Lotus flower, or head of an Indian god, with a leaf on either side, bears but an imperfect resemblance to the ornament in question; and also improbable, for who can imagine that Gioia of Amalfi, the real inventor of the instrument, would have travelled to Hindostan in quest of a polar index?

The Second section of the Third chapter relates the discovery of the Cape, by Da Gama; with a miserable abridgement of his voyage, from Castanheda, Osorius, and Camoens.

The Appendix, which we consider as the only valuable part of the book, is entirely a matter of compilation: it contains Galvano's Discoveries of the World, and Locke's History of Navigation, and explanatory Catalogue of Voyages, reprinted from Churchill's Collection. A large extract from Robertson's Dissertation on India, Renaudot's Translation of the Voyages of two Mahomedans in the Indian Ocean during the ninth century, with two or three papers on nautical subjects, finish the work.

Having expressed our opinion so openly in the preceding pages, little remains to be said on the general merits of this author.

Should we recommend that work as a useful history, which violates every law of historical composition, we should neglect the cause of truth and literature, and offer a shameful sacrifice to lenity, at the expence of our own reputation. To say nothing of the plan, the execution is far below mediocrity; a fault the more unpardonable, as we now possess excellent historical models in our own language. We only appeal to Mr Clarke, what he would have thought of Dr Robertson, had that elegant historian deformed the text of his narrative of the reigns of Mary of Scotland, or of the Emperor Charles, with large uncouth extracts

from his authorities? Was it want of time, or of judgment, that obliged the writer of the *Progress of Maritime Discovery* to distend his volume with so many futile opinions, and names of obsolete authors, that confuse the sense, and embarrass the narrative, with patch-work quotations in the very style of the *Anatomy of Melancholy*? Of these opinions, too, how few are there which deserve either a serious assent, or a serious refutation! If the author of this work believes implicitly in all the absurdities advanced by Bryant and Wilford, and if those fabulous writers may be quoted with impunity, in works of the first importance, among a learned and judicious people, it affords a melancholy presentiment of the fate of the best portion of human knowledge. When the incorruptible monuments of past ages are changed into oracles of fable, and the high-priest of the delusion is allowed to have given a new impulse to the literary world, it forebodes no great prosperity to the commonwealths of science, or of sense. Yet still we have no foundation for extraordinary alarm. The rude style, and the feeble reasoning, which form the general character of this performance, are surely by no means calculated to promote the doctrines which it contains.

Supposing that Mr Clarke intended to make his book an abridgement of his authorities, of the long Catalogue of Locke, and the twenty-five Collections of Voyages, (a plan which, in the uncertainty of his judgment, seems at times to have been in his contemplation), can this volume be regarded as an able specimen of such a work? He has loaded it with so much extraneous matter, embroiled the affairs of the land with those of the ocean, and confounded travelling with discovery by sea, in so strange a manner, as to forfeit every right to the title which he claims. If hydrography was his principal aim, why is there so little produced on that subject? If maritime discovery was not to be treated according to an historical, but a practical method, why are we overpowered with the national history of Portugal, or the revolutions of Hindostan?

But, destitute as the author is of every talent to write the history of man, it must not be forgotten, that he has considerable merit in writing the history of books. His bibliographical knowledge must have cost him some application, which he ought to have extended to the other requisites of history. It is no common proof of his deficiency in true taste, that, in a work of this nature, he has thought fit to adorn the beginning of so many of his sections with a fragment of verse from Bowles or Mickle, as if they had been essays in the manner of the Spectator. The account to the poets for the first chapter is as follows: Eight lines from Thomson, as a motto to Book I.; four from Spencer, at p. 6.; sixteen from Tasso on the trade of Venice; seven from Ossian,

(an)

(an invaluable author !) on Danish Navigation ; sixty-eight from the Prologue of the Processes of English Policie, on Commerce ; three from Hayley's Essay on History ; twenty in Portuguese, from Camoens, with a translation by Mickle, for the benefit of mere English readers ; again, eight lines from Camoens, with ditto ; lastly, at p. 89, twenty lines from Os Lusiadas, with a translation ; in all, 154, in one chapter. 'The rest were long to tell. The first book concludes the account of the celebrated discovery of the Cape by Da Gama, with twenty-eight lines of Mickle's translation of 'the Lusitanian Homer.' The last four are printed in capital letters : they are an apostrophe of the poet to the gallant Admiral who first expelled from that quarter the reign of Chaos and Old Night, and may now be addressed, with considerable propriety, to the historian, who has laboured so innocently and unconsciously to establish it here.

*O glorious chief ! while storms and oceans rav' !
What hopeless toils thy dauntless valour brav'd !
By toils like thine the brave ascend to Heaven ;
By toils like thine immortal fame is given !*

ART. XVI.—*Life of Geoffrey Chaucer, the early English Poet* ; including Memoirs of his near Friend and Kinsman John of Gaunt, Duke of Lancaster ; with Sketches of the Manners, Opinions, Arts, and Literature of England in the 14th Century. By William Godwin. 2 vols. 4to. London, 1803.

THE perusal of this title excited no small surprise in our critical fraternity. The authenticated passages of Chaucer's life may be comprised in half a dozen pages ; and behold two voluminous quartos ! The more sanguine of our number anticipated the recovery of the 'Boke of the Lioun,' and the other long lost labours of Adam Scrivenere, the bard's amanuensis ; the more cautious predicted a new edition of the *Chelt of Rowley*, and the *Shakespeare cabinet of Ireland*. Our expectations were yet farther heightened, by the lofty tone in which Mr Godwin contrasts his own labours and discoveries with those of the former biographers of Chaucer. 'Tyrwhitt, the learned and indefatigable editor of the *Canterbury Tales*, had professed himself unable to produce more than a short abstract of the historical passages of the poet's life ; and Ellis, the elegant historian of our early poetry, has (to use his own words) 'followed Tyrwhitt, in reciting a few genuine anecdotes, instead of attempting to work them into a connected narrative, in which much must have been supplied by mere conjecture, or by a forced interpretation of the allusions scattered through the works of the poet.'

poet.' But Mr Godwin censures this resolution, as having been adopted to save the fatigue of minute research after the documents from which a full and formal life of Chaucer might have been compiled.

'The fact is, however, that this editor (Mr Tyrwhitt) made no exertions as to the history of the poet, but contented himself with examining what other biographers had related, and adding a few memorandums, taken from Rymer's Manuscript Collections, now in the British Museum. He has not, in a single instance, resorted to the national repositories in which our records are preserved. In this *sort* of labour I had been indefatigable, and I have many obligations to acknowledge to the politeness and liberality of the persons to whose custody these monuments are confided. I encountered, indeed, no obstacle, whenever I had occasion to direct my inquiries among the different offices of Government. After all my diligence, however, I am by no means confident that I may not have left some particulars to be gleaned by the compilers who shall come after me.' Preface, p. xii.

After this heavy imputation upon a former editor, to whose industry and labours Chaucer is chiefly indebted for the revival of his fame; after the grave self-congratulation of the biographer; his thanks to those who aided, or did not impede his researches; and his modest apprehensions, that, notwithstanding all his diligence, some gleanings may remain for future compilers;—the reader will learn, with admiration, that Mr William Godwin's two quarto volumes contain hardly the vestige of an authenticated fact concerning Chaucer, which is not to be found in the eight pages of Messrs Thomas Tyrwhitt and George Ellis. The researches into the records have only produced one or two writs, addressed to Chaucer, while clerk of the works; the several grants and passports granted to him by Edward III. and Richard II., which had been referred to by former biographers; together with the poet's evidence in a court of chivalry, a contract about a house, and a solitary receipt for half a year's salary. These, with a few documents referring to John of Gaunt, make the Appendix to the book, and are the only original materials brought to light by the labours of the author. Our readers must be curious to know how, out of such slender materials, Mr Godwin has contrived to rear such an immense fabric? For this purpose he has had recourse to two fruitful expedients. In the first place, when the name of a town, of a person, or of a science, happens to occur in his narrative, he stops short, to give the history of the city *ab urbe condita*; the life of the man, from his cradle upwards, with a brief account of his ancestors; or a full essay upon the laws and principles of the science, with a sketch of the lives of its most eminent professors. We will not do Mr Godwin the injustice to suppose, that this mode of biography is copied from some respectable

spectable old gentleman profling by his fire-side, who halts in the story about Tom, till he has given the yawning audience the exploits and genealogy of honest Dick. We believe he profited by instructions derived from no less a person than Miguel Cervantes. ' If you have occasion,' says that author, ' to mention a giant in your piece, be sure to bring in Goliah, and on this very Goliah (who will not cost you one farthing) you may spin out a swinging annotation. You may say, *The giant Goliah, or Goliath*, was a Philistine, whom David the shepherd slew with the thundering stroke of a pebble, in the valley of Terebinthus. *Vide Kings*, such a chapter and such a verse, where you may find it written. If, not satisfied with this, you would appear a great humanist, and would show your knowledge in geography, take some occasion to draw the river Tagus into your discourse, out of which you may fish a most notable remark: *The river Tagus, say you, was so called, from a certain king of Spain. It takes its rise from such a place, and buries its waters in the ocean, kissing first the walls of the famous city of Lisbon; and some are of opinion that the sands are gold,*' &c. &c. &c. So well has Mr Godwin profited by these instructions, that the incidents of Chaucer's life, serving as a sort of thread upon which to string his multifarious digressions, bear the same proportion to the book that the alphabet does to the Encyclopædia, or the texts of a volume of sermons to the sermons themselves. A short glance at the work will fully justify this assertion.

Chaucer was born in London.—This is the subject of the first chapter. The commentary is a sketch of the history of London from the year of Christ 50, down to the reign of Edward III, with notices respecting the principal citizens and Lords Mayor, Henry Picard, John Philpot, Sir William Walworth; not forgetting Whittington and his cat. The proportion of the commentary to the text is as twelve pages to as many lines.—Chaucer must have gone to school.—This is text the second, and forms a sufficient apology for a long essay on the learning of the age; while the probability that, during the vacation, Chaucer must have read romances, * introduces a long dissertation on these compositions, awkwardly abridged from Warton and Ellis. But Chaucer must have gone sometimes to church,—and therefore Mr Godwin feels himself obliged to give an account of the peculiar tenets of the church of Rome; some of which, particularly those of purgatory and auricular confession, seem greatly to the taste of our philosophical biographer. The author proceeds, with

* Mr. Godwin may have himself read Valentine and Orson, while at school; but during the 13th century, romances were the amusement of grown gentlemen.

with the most unfeeling prolixity, to give a minute detail of the civil and common law, of the feudal institutions, of the architecture of churches and castles, of sculpture and painting, of minstrels, of players, of parish clerks, &c. &c.; while poor Chaucer, like Tristram Shandy, can hardly be said to be fairly born, although his life has attained the size of half a volume. How these various dissertations are executed, is another consideration; but we at present confine ourselves to the propriety of introducing them as part of the life of Chaucer. We are aware that Mr Godwin has informed us, that, 'to delineate the state of England, such as Chaucer saw it, in every point of view in which it can be delineated, is the subject of this book;' and that 'the person of Chaucer may in this view be considered as the central piece in a miscellaneous painting, giving unity and individual application to the otherwise disjointed particulars with which the canvas is diversified.' Now, had the biographer either possessed, from the labours of others, or recovered, by his own industry, facts sufficient to make a regular and connected history of Chaucer, bearing some proportion to the 'disjointed particulars' so miscellaneous piled together, we could have objected less to the digressive matter, although even then we might have required it to be abridged and condensed. But where the central figure, from which the whole piece takes its name and character, is dimly discoverable in the back-ground, obscured and overshadowed by the motley group of abbeys, castles, colleges and halls, fantastically pourtrayed around it, we cannot perceive either unity or individuality in so whimsical a performance. The work may be a view of the manners of the 13th century, containing right good information, not much the worse for the wear; but has no more title to be called a life of Chaucer, than a life of Petrarch.

We have said that Mr Godwin had two modes of wire-drawing and prolonging his narrative. The first is, as we have seen, by hooking in the description and history of every thing that existed upon the earth at the same time with Chaucer. In this kind of composition, we usually lose sight entirely of the proposed subject of Mr Godwin's lucubrations, travelling to Rome or Palestine with as little remorse as if poor Chaucer had never been mentioned in the title-page. The second mode is considerably more ingenious, and consists in making old Geoffrey accompany the author upon these trifling excursions. For example, Mr Godwin has a fancy to describe a judicial trial. Nothing can be more easily introduced; for Chaucer certainly studied at the Temple, and is supposed to have been bred to the bar.

* It may be amusing to the fancy of a reader of Chaucer's works, to represent to himself the young poet accoutred in the robes of a lawyer, examining a witness, fixing upon him the keenness of his eye, addressing himself with anxiety and expectation to a jury, or exercising the subtlety of his wit and judgement in the developement of one of those quirks by which a client was to be rescued from the rigour of strict and unfavouring justice. *Perhaps* Chaucer, in the course of his legal life, saved a thief from the gallows, and gave him a new chance of becoming a decent and useful member of society: *perhaps*, by his penetration, he discerned and demonstrated that innocence which, to a less able pleader, would never have been evident, and which a less able pleader would never have succeeded in restoring triumphant to its place in the community, and its fair fame. *Perhaps* Chaucer pleaded before Tresilian and Brember, and lived to know that those men whose fiat had silenced his argument, or to whose inferiority of understanding, *it may be*, he was obliged to vail his honoured head, were led to the basest species of execution, amidst the shouts of a brutish and ignorant multitude.' vol. I. p. 369.

This curious *tirade* is not to be placed among those occasional flourishes to which authors who affect the striking and the sentimental are so peculiarly addicted. It is not given as a day-dream, in which the writer gives reins to the vivacity of his imagination; but the supposed cases which Mr Godwin puts, without the least authority from the record, are gravely intended as illustrations of the *Life of Chaucer*. For example, the next sentence informs us—' We have a right, however, to conclude, from his early quitting the profession, that he did not love it: ' And this averment is followed with a list of the unhappy effects which the study of the law produces on the human understanding and temper. We do not think the profession congenial to the feelings of a youthful poet; but it is probable, that he who could stoop to the drudgery of comptroller of the customs, had other reasons for leaving the bar than mere disgust at the profession. For ' coquets and dockets,' and ' sugar casks, and beer-butts, and Common-council men,' (p. 502.), may be supposed to have as benumbing an effect upon the heart and imagination, as cases and precedents, and the ambidexter ingenuity of the bar. Another instance of the laudable manner in which the narrative is bolstered out by imaginary circumstances, occurs where Mr Godwin treats of Chaucer's confinement in the Tower. The biographer is not satisfied with putting the bard into a dungeon; farther severities are conjured up against him; his apartment is supposed to have been changed for a worse. ' It is probable that he was considered as a person of inferior consequence, and obliged to yield his apartment to some statesman of loftier title, who was a few days after conducted to the scaffold.' Nay, further, it is Mr Godwin's opinion, that his friends were denied access

access to him, and a *mouton* or jail-spy quartered in his chamber ; both of which suppositions afford a good sentence or two of philosophical condolence.

' It is likely that he was forbidden the visits of his friends ; but by the magic power of fancy he called about him celestial visitants. It is likely, that a jailor or a turnkey was planted in his apartment, under pretence of checking unlicensed attempts at correspondence or escape ; but in reality, serving only to exclude him from one of the best inheritances of man, the power of being alone in the silence of elemental nature, and with his own thoughts. Chaucer, however, assisted by the workings of his mind, instead of seeing continually the base groom who attended him, saw only the gods who protected and cheered him in his cell.' vol. II. p. 477.

It is needless to examine what foundation exists for such vague suppositions, when we know that Chaucer was so much master of his time and thoughts during his confinement as to compose his *Testament of Love*. His biographer might with equal plausibility have grafted upon his story a supposed attempt to escape, and given us a Newgate kalendar chapter from the horrors of Caleb Williams, or the languors of St Leon. These assertions rest entirely upon the *gratis dictum* of Mr Godwin, and, with a thousand others, are only introduced with an ' it is possible,' or ' it is probable,' or indeed the bare conjunction *if*, which having been long renowned for a peace-maker, will doubtless in future be allowed equal virtue in compilation. But we are deeply interested, for our own sake, as well as that of the public, in entering our protest against this mode of book-making. If a biographer be at liberty to introduce into his story a full account of every contemporary subject of disquisition, however little connected with his hero, and can assume the further right of connecting his hero, by virtue of a gratuitous supposition, with whatever scenes he may take a fancy to describe, it is obvious, that unless the author's mercy temper his strength, the rights of the courteous reader are in no small peril. To what length Mr Godwin might have extended his history, not so much of what Chaucer did actually *do*, as of what he and all his contemporaries *might*, *could*, *would*, or *should have done*, cannot now be exactly ascertained. He informs us in his Preface, that after writing about a thousand quarto pages, it was altogether uncertain when he might have drawn to a close. But there exists a superior power, to which even authors must ' vail the honoured head,' and, fortunately for the Reviewers, *Ecce Deus ex Machina !*

' If I, enamoured of my subject, might have thought no number of pages, or of volumes, too much for its developement, it was by no means impossible that purchasers and readers would think otherwise. My bookseller, who is professionally conversant with matters of this sort, assured me, that two volumes in quarto were as much as the public would

would allow the title of my book to authorise. It would be in vain to produce a work, whatever information it might comprise, which no one will purchase or read : I have therefore submitted to his decision.'

Upon perusing this sentence, the cold drops stood upon our brow at contemplating the peril which we had escaped ; and while we lauded the gods for Mr Phillips' tardy interference in our behalf, we marvelled not a little at the good man's easy faith, which had so long deferred it.

From these remarks upon the general structure of the work, we may now descend to view the execution of the plan, such as it is, beginning with what relates to Chaucer, who (*paris minima sui*) occupies the least share in his own memoirs. It appears to us, that, among the very few facts concerning our bard, which Mr Godwin has given us, some are assumed without due evidence. For example, we are informed, that, ' having passed through a certain course of education, Chaucer was removed to the University of Cambridge.' The only proof which is brought of this assertion is, Chaucer's having termed himself in the Court of Love, ' Philogenet of Cambridge, clerk.' But we cannot see how the acknowledged falsehood of one part of this designation can possibly prove the truth of the rest ; or why Chaucer may not have invented a fictitious character to be attached to a false name. It seems to us much such an argument, as might be adduced to prove that the late Mr Mason resided at Knightsbridge, inasmuch as that was the pretended abode of the facetious Malcolm MacGregor. In like manner, we are very willing to suppose, that the old bard was a man of a jovial and festive habit ; but we would rather infer this from his writings, than from supposing that he daily consumed the whole pitcher of wine which was allowed him by the King. Indeed, from the address of the host to Chaucer, we imagine a personage of a grave and downcast appearance, very different from the idea we might form, *a priori*, of the jolly author of the Canterbury Tales : but it would be as ridiculous to argue from hence, that he was an enemy to mirth, as to hold that, with or without assistance, he daily disfussed four bottles of wine, because he received such an allowance from the royal cellar.

The public are indebted to Mr Godwin for the recovery of Chaucer's evidence in a question about bearing arms, occurring betwixt Scroope and Grosvenor ; * but the manner in which it is narrated, is a good illustration of the strained inferences concerning Chaucer's temper and disposition, deduced by his biographer from the most common and trivial occurrences.

Chaucer

* We hold this to be the only circumstance of importance, which Mr Godwin's researches have brought to light ; and so far our thanks are due to him.

‘ Chaucer was a man of a frank and easy temper, undeformed by haughtiness and reserve, and readily entering into a certain degree of social intercourse on trivial occasions. This particular is strongly confirmed to us by the curious record of his testimony, in the cause of arms between Scrope and Grosvenor. He describes himself as walking in Friday Street, in the city of London, and observing there the arms he had seen always borne by the family of Scrope hung out as a sign. This inconsiderable circumstance immediately excites an interest in the patriarch of the English language, and English poetry. The Scropes were his friends. He accosts a stranger, whom he perceives accidentally standing by, and asks, ‘ What inn is that which I observe has hung out the arms of Scrope for its sign ? ’ — ‘ Nay,’ replied the other, ‘ it is no inn, nor are these the arms of Scrope ; they are the shield of a Cheshire family of the name of Grosvenor.’ In Chaucer, the thus addressing himself to a person unknown, is no evidence of a vulgar, indelicate, and undiscriminating mind. It shows that he was a character, not fastidious enough to refuse to interest itself in trifles, and frank, even and affable in his intercourse with mankind.’ p. 569, vol. II.

And all this is to be inferred from a question asked at a passenger, the fruit probably of momentary curiosity. This mode of drawing characters ought to supersede that of the ingenious Frenchman, who describes them accurately from seeing the party’s handwriting.

While Mr Godwin was thus poring upon a millstone, and proclaiming his discoveries to the world, we are surprised that he has omitted the famous tradition, that Chaucer, while in the Temple, was fined two shillings ‘ for beating a Franciscan friar in Fleet-Street.’ (See Fuller & Speght.) This circumstance, with a proper allowance of possibilities, would have gone some length in eking out a third quarto. For, in the first place, it is naturally connected with the history of Fleet-Street, and Fleet-ditch, and the Fleet-Prison, and of Fleta the law-book, and of the Fleet or Royal Navy, with some account of which (so naturally bearing upon the life of Chaucer) the reader must no doubt have been highly gratified. Secondly, the circumstance of the fine, would have happily introduced a history of the silver coinage, with an abbreviate of the Temple records, from the earliest period to the present day ; and the political justice of fine and imprisonment might have been discussed in a separate chapter. Thirdly, the mention of the Franciscan, would have paved the way with great propriety for a history of the mendicant orders, and have saved Mr. Godwin the trouble and disgrace of foisting it in elsewhere, upon a much more flimsy pretext. (vol. II. p. 20). But, above all, the cause of the scuffle, and the drubbing itself, would have led to many a learned dissertation. It is probable, that one or both parties were in liquor. If so, when, how, or with

with what liquor did they become intoxicated? Was it with wine of Ape, or of Chepe; with Malverie, or with Hippocras? Was it together or separately? And can any light be thrown upon the combat, from the similar affray betwixt justice Shallow when an Inn's of court man, and Samson Stockfish the fruiterer? Again, it is probable that the quarrel originated in some theological dispute,—and the vast and thorny field of controversy might have been accurately surveyed, to enable the reader to fix upon the precise spot occupied by the disputants. Perhaps Chaucer offended the friar by the freedom of his conversation,—and why not insert all the jocose and satirical passages of the Canterbury Tales? To illustrate the nature of the beating, Mr Godwin might have described—

—‘ Your *souse*, your *wherit* and your *dowst*,
Tugs on the hair, your *lob o'* the lips, your *thumb*,
 —your *kick*, the fury of a foot,
 Whose indignation commonly is stamped
 Upon the hinder quarters of a man,—
 With all your blows and blow-men whatsoever,
 Set in their lively colours, givers and takers.’

All which knowledge is unfortunately lost to the world, perhaps through the ill-considered interference of Mr Phillips the publisher.

Some particular passages of the life, are less fancifully and more correctly delineated. Mr Godwin combats, and in our opinion successfully, the opinion of those who deny the honourable claim of Thomas Chaucer, to call the poet father: and he has vindicated the relation, which the Dreme of Chaucer unquestionably bears to the History of John of Gaunt.

The critical dissertations upon Troilus and Crefeide, and Chaucer's other poems, have considerable merit. They are the production of a man who has read poetry with taste and feeling; and we wish sincerely, that instead of the strange farrago which he calls the life of Chaucer, he had given us a correct edition of the miscellaneous poetry of the author, upon the same plan with Mr Tyrwhitt's admirable Canterbury Tales. It is true, that we could not have expected from Mr Godwin, either the extensive learning or the accuracy of illustration which Mr Tyrwhitt has displayed. But, as already noticed, his critical disquisitions have occasional merit; and he might have pleaded the ancient prerogative of commentators, for writing in a more rambling and diffusive style than is consistent with the dignity of history or biography. Mr Godwin is sometimes rather hasty in his critical conclusions. He exclaims against Chaucer, for ‘ polluting the portrait of (Crefeide's) virgin character in the beginning of the poem, with so low and pitiful a joke as this—

' But whether that she children had or none,
I rede it not, therefore I let it gone.' Vol. I. p. 305.

If Mr Godwin had perused the poem attentively, he would have seen that no joke was intended, and that Cresseide was no maiden, but in fact a young widow.

' And as a widowe was she and alone.'

And again, when invited by Pandarus to do honour to May,

' Eighe ! God forbid, quod she, what ! be ye mad?
Is that a *widowē's* life, so God you save ?
Pardy you makin me right sore adrad ;
Ye bene so wilde, it semith as ye rave.
It fete me wele better, aie in a cave
To bide, ard rede on holy saintis lives :
Let maidins gon to dance and young wives.'

We were much surprised to find, that the Canterbury Tales, the most important, as well as the most exquisite of Chaucer's productions, have attracted so little of Mr Godwin's attention. He might have displayed, in commenting upon poems as varied in subject as in beauty, his whole knowledge of the manners of the middle ages, were it ten times more extensive. But Mr Godwin, beginning probably to write before he had considered either the nature of his subject, or the probable length of his work, had exhausted both his limits and materials ere he came to the topic upon which he ought principally to have dwelt. The characters, therefore, of the several pilgrims, so exquisitely described, that each individual passes before the eyes of the reader, and so admirably contrasted with each other; their conversation and manners, the gallantry of the Knight and Squire, the affected *sentimentality* of the Abbess, the humour of mine Host, and the Wife of Bath; the pride of the Monk, the humility of the Parson, the learning and poverty of the Scholar, with the rude but comic portraits of the inferior characters, are, in the history of the life and age of Chaucer, of which they form a living picture, passed over in profound silence, or with very slight notice. The truth is, Mr Godwin's speed and strength were expended before he came within sight of the goal, and he saw himself compelled with a faint apology to abandon that part of his subject which must have been universally interesting. The few remarks which he has made upon the Canterbury Tales, induce us to believe that he has seen and regretted his error; but it is a poor excuse, after writing a huge book, to tell the reader that it is but ' superficial work,' because the author 'came a novice to such an undertaking.' (See Preface). It is the duty of an editor, to collect and arrange his materials before he begins to print his work; nor will the public be satisfied

fied with an apology, which ought either to have deterred him from the undertaking entirely, or at least to have retarded the execution of it, till study and labour had supplied the defects of superficial information. As Mr Godwin is unquestionably a man of strong parts, we by no means discourage him from applying himself to illustrate the history of his country, but we would advise him in future, to read *before* he writes, and not merely *while* he is writing.

The history of 'Old John of Gaunt, time-honoured Lancaster,' occupies a considerable portion of these volumes. He is styled in the title page, Chaucer's 'near friend and kinsman ;' an abuse of words, if, as we conceive, *kinsman* can only be correctly used to express a blood relation. John of Gaunt was undoubtedly Chaucer's patron, and ultimately stood in a certain degree of affinity to him, by marrying his concubine, a sister of the poet's wife; but this connexion could not give to the bard a portion of the blood of the Plantagenets, or render him in any sense the kinsman of the Duke of Lancaster. In the historical part of his work, Mr Godwin has proposed to himself a splendid plan. Antiquities had, in his opinion, hitherto been the province of

—‘men of cold tempers, and sterile imaginations,’ whose works are compiled ‘with such narrow views, so total an absence of discrimination, and such an unsuspecting ignorance of the materials of which man is made, that the perusal of them tends for the most part to stupefy the sense, and to imbue the soul with moping and lifeless dejection. It was my wish, had my power held equal pace with my strong inclination, to carry the workings of fancy and the spirit of philosophy into the investigation of ages past. I was anxious to rescue, for a moment, the illustrious dead from the jaws of the grave, to make them pass in review before me, to question their spirits, and record their answers. I wished to make myself their master of ceremonier, to introduce my reader to their familiar speech, and to enable him to feel, for the instant, as if he had lived with Chaucer.’ Preface, x.

This is well proposed, and expressed with that dignified contempt of his predecessors labours, which especially becomes an author at the moment when he is about to avail himself of the information they afford him. But it is one thing to call spirits from the valy deep, and another to compel their obedience to the invocation. When we expected to see the heroes of Cressy and Poitiers stalk past in the rude and antiquated splendour of chivalry, as perchance they might have appeared upon the summons of Warton, Ellis, or some such *cold-tempered, sterile-minded antiquary*, the philosophical phantasmagoria of Mr Godwin presented us with a very different set of beings. It seems to have been his rule,

that if it be difficult to think like our ancestors, it is very easy to make them think like ourselves ; and therefore, whatever motives Mr Godwin himself esteems praiseworthy and laudable, he imputes to his hero John of Gaunt, with all the liberality and contempt for congruity of the worthy squire who equipped his Vandyke portraits with modern periwigs. In this respect, the work reminds us of a particular class of novels, said to be ' founded on real history,' in which the *dramatis persona* are assumed from the ages of chivalry, but apparelled in the sickly trim of sentiment peculiar to the Grevilles and Julias of Mr Lane's half-bound duodecimos. Mr Godwin's dukes and knights hold, in like manner, the language, we had almost said the cant, of his *soi-disant* philosophy ; and argue as learnedly of the nature of the human mind, of cause and effect, and all that, as if they had occasionally presided at Coachmakers Hall. The Duke of Lancaster was unquestionably the wisest prince of his time ; yet his honoured shade must forgive us, if we deem him incapable of framing the profound and polite oration which he is here supposed to address to Chaucer, upon his being appointed an ambassador. We can only afford room to insert the following grand finale : ' Man is a complex being, and is affected with mixed considerations ; and your contemporaries will listen with far different feelings to your beautiful and elevated productions, if they flow from an ambassador and a minister of state, than if you remained obscurely sheltered under your natal roof, in the city in which you were born, or sequestered among the groves and streams which adorn your neighbourhood at Woodstock.' And this *twaddling* stuff is supposed to be spoken by John of Gaunt, and to Geoffrey Chaucer ! And this is carrying ' the workings of fancy,' and ' the spirit of philosophy,' into the investigation of ages past, and rescuing the illustrious dead from the jaws of the grave !' Imbued ' with moping and lifeless dejection, and stupified ' as we are, after the perusal of two huge quarto volumes of incoherent narrative and trite sentiment, we cannot help feeling, at such absurdity, a momentary impulse of surprise and indignation !

Of the miscellaneous information contained in these volumes, we cannot be expected to treat at length, especially as the greater part of it has nothing to do with the proper subject of the book. It seems to us, that Mr Godwin, a novice, as he himself informs us, in the study of ancient history, had applied himself to his task with the ardour of a proselyte. Every fact, every peculiar view of manners which occurred in the course of his reading, had to him the charms of novelty ; and he was benevolently eager to communicate to others the information which he had just acquired. But, unfortunately, a mind which has newly received a fresh train

train of ideas, is almost invariably found incapable to abridge or digest them, as no man can draw a map of a country which he traverses for the first time. Upon subjects not familiar to our thoughts, we must be contented to express ourselves with the crude prolixity of the works from which we have derived our information ; and our attempts to be copious and distinct, will commonly produce but a string of tedious and ill-combined extracts, instead of a concise and luminous system. Hence the long, dull, and unnecessary details with which Mr Godwin has favoured us upon every subject which crossed his path. He could but write in proportion as he read, and empty his common-place as fast only as he filled it. A comprehensive view of his subject we cannot possibly find in his writings ; for it was at no time wholly before his own eyes. He knew not when or where to stop ; and, in fact, was forced, from mere want of room, to abandon his work, half-finished, at the moment it became most interesting.

Some of the dissertations, considered abstractedly, possess considerable merit ; and we cannot refuse praise to the industry of Mr Godwin, who has acquired a great fund of knowledge, however ill-arranged, upon subjects to which he was so lately an utter stranger. We have already said, that we would be pleased to see some parts of his book arranged as notes upon Chaucer's poems. We find it impossible to ' pick them in a pile of noisome and multy chaff ; ' but when they are brought forward in a work arranged upon a better plan, our approbation shall be conferred much more willingly than our present censure. A natural consequence of the hurry with which Mr Godwin has compiled his work, is the inaccuracy which has occasionally crept in, although less frequently than we could have thought possible. Vere, for example, the favourite of Richard II., is likened to ' Carr, the minion of James I., with these advantages in favour of the former, that he was of an ancient family, and Carr an up-start,' p. 366. This is a mistake. Carr, or Ker, Earl of Somerset, was the third son of Sir Thomas Ker of Fairnyhirst, the chief of a very ancient and powerful family, now represented by the Marquis of Lothian. As he had unfortunately little personal merit, it is hard to deprive him of the advantage of birth, which he really possessed. The universal predominance of the French language in the reign of Edward III. is expressed with rather too much latitude, vol. I. p. 18. Previous to the birth of Chaucer, a remarkable change had begun to take place in this particular. Histories, and long poems of devotion and chivalry, were already translated out of the Romance or French language into English, and these in such numbers, as sufficiently to demonstrate that they

were not required for the use of the lower and middle classes alone. We should have been pleased to have seen the authority upon which the romances of *Robert sans peur* and *Robert le diable* are ascribed to Waer, having esteemed these tales of later date than the *Roman de Rou*. The story of Aulaf the Dane, who is said to have penetrated into King Athelstane's tent, disguised as a minstrel, is rather apocryphal, especially with the miraculous decorations of William of Malmesbury. Mr Godwin seems to entertain some doubt of John of Gaunt's flight into Scotland, and residence at Holyrood-house. But no fact can be better attested. Andrew of Winton, a cotemporary historian, has dedicated a chapter to show

' Ohwen of Longcastele the Duke

Refute intil Scotland tuk.' Book IX. c. 4.

He mentions particularly his progress, in which he was attended by Earl William of Douglas, from Berwick to Haddington, and thence to Edinburgh—

' And intil Haly-rwde-hows that Abbay

Thai made hym for to take herby.'

This circumstance, and the more recent asylum afforded in Scotland to Henry VI., are probably alluded to by Molinet, when he terms that country

' De tous siecles, le mendre

Et le plus tollerant.'

The style of Mr Godwin's life of Chaucer is, in our apprehension, uncommonly depraved, exhibiting the opposite defects of meanness and of bombast. This is especially evident in those sentimental flourishes with which he has garnished his narrative, and which appear to us to be executed in a most extraordinary taste. In the following simile, for example, we hardly know whether most to admire the elegance and power of conception, or the happy ease and dignity of expression.

' Its slender pillars (the author is treating of the later Gothic architecture) may possess various excellences, but they are certainly not magnificent; and the shafts by which the pillars are frequently surrounded have an insignificant air, suggesting to us an idea of fragility, and almost reminding us of the humble vehicle through which an English or German rustic inhales the fumes of the Indian weed.' Vol. I. p. 145.

In p. 181, we hear of ' a tune, in which the luxuriance and multiplicity of musical sounds obscures and tramples with disdain upon the majestic simplicity of words.' In other places, we find ' the technicalities of justice'—' the religious nerve of the soul of man'—young knights who looked upon the field of Roncesvalles with ' augmented circulation'—' unforshortened figures'—an ' ancient baron, neigboured to a throne,' and fundry other extremely new and whimsical expressions. But even these concocted

ceited barbarisms offend us less than the execrable taste displayed in the following account of Chaucer's early studies.

' He gave himself up to the impressions of nature, and to the sensations he experienced. He studied the writings of his contemporaries, and of certain of the ancients. He was learned according to the learning of his age. He wrote, because he felt himself impelled to write. He analyzed the models which were before him. He sought to please his friends and fellow scholars in the two Universities. He aspired to an extensive and lasting reputation.' Vol I. p. 436.

We have no doubt that Mr Godwin considers these short sentences as the true model of a nervous and concise style. For our part, we find the sense so poor and trite, when compared with the pithy and sententious mode of delivery, that we feel in our closet the same shame we have sometimes experienced in the theatre, when a fourth-rate actor has exposed himself by mouthing, slapping his pockets, and, according to stage phrase, *making the most* of a trifling part. We will not pursue this subject any further, although we could produce from these ponderous tomes some notable instances of the mock heroic, and of the tone of false and affected sentiment. Such passages have tempted us to exclaim with Pandarus (dropping only one letter of his ejaculation),

' Alas ! alas ! so noble a creature

As is a man should *reden** such ordure !'

Upon the whole, Mr Godwin's friends have, in one respect, great reason to be satisfied with the progress of his convalescence. We hope and trust, that the favourable symptoms of his case may continue. He is indeed now and then very low : or, in other words, uncommonly dull ; but there is no apparent return of that fever of the spirits, which alarmed us so much in his original publications. The 'insurrection of Jack Straw (a very dangerous topic) produces only a faint and moderate aspiration breathed towards the ' sacred doctrines of equality,' which it is admitted are too apt to be ' rashly, superficially, and irreverently acted upon, involving their disciples in the most fearful calamity.' The disgrace of Alice Pierce, or Perrers, the *chere amie* of Edward III, or, as Mr Godwin delicately terms her, ' the chosen companion of his hours of retirement and leisure,' calls down his resentment against the turbulence and rudeness of the Good Parliament. But less could hardly have been expected from the author of the Memoirs of a late memorable female.

We cannot help remarking that the principles of a modern philosopher continue to alarm the public, after the good man

himself has abandoned them, just as the very truest tale will sometimes be distrusted from the habitual falsehood of the narrator. We fear this may have incommoded Mr Godwin in his antiquarian researches, more than he seems to be aware of. When he complains that private collectors declined 'to part with their treasures for a short time out of their own hands,' did it never occur to Mr Godwin that the maxims concerning property, contained in his 'Political Justice,' were not altogether calculated to conciliate confidence in the author?

But, upon the whole, the *Life of Chaucer*, if an uninteresting, is an innocent performance; and were its prolixities and superfluities unsparingly pruned (which would reduce the work to about one fourth of its present size), we would consider it as an accession of some value to English literature.

ART. XVII. Experiments and Observations on the various Alloys, on the Specific Gravity, and on the Comparative Wear of Gold. Being the Substance of a Report made to the Right Honourable the Lords of the Committee of Privy Council, appointed to take into consideration the State of the Coins of this Kingdom, and the present Establishment and Constitution of his Majesty's Mint. By Charles Hatchett Esq. F. R. S. From Phil. Transl. for 1803, Part I. pp. 150.

IN the month of February 1798, a committee of Privy Council, composed of the Great Officers of State, the Chiefs of the several Courts, the President of the Royal Society, and one or two other persons in high public stations, was appointed to examine the state of the British coin. One of the first objects of inquiry was, the cause of that loss which the gold currency is found to sustain in the course of circulation; and the Committee very properly delegated this investigation to Messrs Cavendish and Hatchett, who, between the latter end of 1798 and the month of April 1801, carried on that most interesting course of experiments which forms the subject of the present communication. Although Mr Hatchett is the narrator of the proceedings, and very honourably takes upon himself the responsibility of any inaccuracies that may have been introduced, he assigns to Mr Cavendish his just share of praise, by stating that the new machinery and dies used in the experiments were entirely of his contrivance.

"Although the questions to be resolved by this inquiry, related to the wearing of gold by friction, yet, in the course of the experiments, various facts have been discovered respecting the combinations

tions of the precious metals, which the expensive nature of the materials had prevented former chemists from observing. As the results of Mr Hatchett's elaborate investigation are highly important both to the political economist and the metallurgist, we shall present our readers with a short abstract of the points which he has succeeded in ascertaining; and we shall at the same time notice that part of the method of conducting the experiments which is distinguished by its originality.

Two general objects of inquiry were proposed; to determine the comparative effects of friction upon soft and upon hard gold, and to determine the comparative effects of friction upon smooth and flat, and upon rough surfaces. Neither of these problems had ever been satisfactorily solved; the solution of the former was still a matter of complete uncertainty, and the common opinion respecting that of the latter was founded on vague conjecture.

In order to obtain a full explanation of the matter, it was necessary to examine, first of all, the effects of different alloys and in different proportions, from one twelfth (the standard) down to $\frac{1}{1225}$.

By a great multitude of experiments, Mr Hatchett found that, of all the metals, bismuth has the most powerful effect in destroying the ductility of gold: That lead and antimony are little inferior to bismuth in this respect: That less than $\frac{1}{12}\%$ of these three metals is sufficient to render gold brittle: That nickel is less injurious than any of the semimetals; and that tin, which has generally been supposed so peculiarly destructive of ductility, as to render a mass of gold brittle, of which it did not sensibly increase the weight, possesses no such property when perfectly free from admixture of other metals: That gold may be made standard with iron, and retain its ductility, though its hardness is increased, and its colour changed: That all the metallic substances, except silver and copper, are injurious either to ductility or colour, or both; and, however excellent alloys these two may prove when pure, the smallest admixture of the metals most injurious to ductility, will render them unfit for the purpose: That gold alloyed with silver, or copper, or tin, may be fused without loss from volatilization or oxydation; but that a considerable loss of weight is produced from these causes in the fusion of other alloys of gold. The general conclusion from the whole of this elaborate course of experiments, is decidedly in favour of the two alloys, copper and silver, already generally used, by which test soever we try them—whether by their effects on the colour, on the ductility, or on the fusibility of the mixture. These metals alone give a compound, exactly resembling gold,

gold, in the three important properties of external appearance, capacity of being wrought, and capacity of being melted without loss.

Besides the facts just now mentioned with respect to alloys of tin and iron, the first part of Mr Hatchett's inquiries have suggested a variety of new chemical observations, chiefly upon the union of gold with arsenic and with manganese.

The next object was, to examine, with great minuteness, the specific gravity of gold differently alloyed, and to point out the causes of those variations to which it is liable.

Mr Hatchett has given the results of his comparisons in the form of a table, exhibiting the specific gravities of the gold when alloyed with the different metals. The most singular fact which this table presents, is the effect of lead and bismuth upon the gold which they alloy. Although their specific gravities are extremely different, they produce, by mixture with gold, compounds nearly equal in specific gravity. Gold of the specific gravity 19.172 alloyed with lead (spec. grav. 11.352) was of spec. grav. 18.080; with bismuth (spec. grav. 9.822) it was of spec. grav. 18.038; with silver its specific gravity was only 17.927. Mr Hatchett's table points out other analogies between bismuth and lead, and other diversities between the specific gravities of simple and compound metals.

The next table contains a comparison of the changes produced in the bulk of gold by various alloys. The greatest contraction appears to have been produced by tin, and the greatest expansion by a mixture of lead and copper. A mixture of tin and copper produced the smallest contraction; cobalt, and a mixture of copper and zinc, the smallest expansion. The expansion produced by silver, was less than that produced by any single metal, except cobalt. In both these sets of experiments, the proportion of the alloy was that of the standard.

From a great number of experiments on the variations of specific gravity, our author concludes, that the same mass varies in specific gravity according to the mutual diffusion of the metal and the alloy, and according to the degree of friction which, though equally mixed, it may have sustained; and that it may even vary in quality, although all of the same specific gravity.—All these experiments, which are too numerous for any abridgement, completely justify one conclusion,—that it is absurd to estimate the value of the coin of any country by insulated experiments on a few pieces. Mr Hatchett also disproves the statements of many authors relative to the specific gravity of fine and standard gold, from which some have inferred the inferiority of the standard gold in the present reign. It appears, on the contrary,

trary, that the average specific gravity of the gold coin, at present in circulation, is considerably greater than that of the same coin in former reigns. As illustrative of the errors into which authors have been led by reasoning from a few experiments on this subject, we may mention the inference of Mr Briffon, that the specific gravity of the gold coin of France is greater than that of the English gold coin. He drew this conclusion from examining a single guinea, and from finding that its specific gravity was to that which he had found for the French gold, as 17.629 to 17.647. Even admitting this experiment to have been conclusive with respect to the whole coins similarly alloyed, Mr Hatchett proves, very clearly, by his own observations, that the different proportions of silver and copper in the same portion of alloy, may vary the specific gravity of the compound between 17.927 and 17.457. The experiments, on the other hand, by which the officers of the mint proved that the coin of this reign is better than that of the former periods since the Restoration, were made with ~~more~~ 170,000 guineas taken promiscuously from the different reigns.

The last inquiry into which our author entered, was undertaken in order to compare the effects of friction upon gold coins differently alloyed. As the pieces of gold currency are exposed to rubbing either against each other, or against silver and copper, or against sand and other gritty powders, each of those cases has been examined by a series of experiments with proper apparatus. The friction of different alloys, and of different dies, was compared by means of two frames in which the specimens to be examined were fixed, each above another, with a superincumbent weight. A motion backwards and forwards in every direction was communicated to the frames by a windlass and cranks. All the pieces were pressed by the same weight; they all moved equally, and bore flat each against another: and an account could be kept of the quantity of friction, by the number of revolutions which the wheels of the windlass performed. Mr Hatchett exhibits, in tables, the results of the various experiments made with this apparatus. It appears from these, that gold made standard with copper and with silver, suffers less by friction than gold of 23 carats $3\frac{1}{2}$ grains; that gold made standard with a mixture of copper and iron, or copper and tin, suffers a great deal more than fine gold; and that dies, of whatever alloy, rubbed against each other, suffer more if rough than if smooth; that, *ceteris paribus*, the more ductile metals are worn by the harder ones, which become coated by them; that copper, rubbing against copper, suffers a much greater diminution than gold against gold; that standard gold, if ductile and soft, suffers less when rubbed against the same, than harder and more brittle standard gold when rubbed against the same;

same; that when soft and hard gold rub together, the former loses most. All the experiments leading to these conclusions were made with very long continued friction, under a weight of above three pounds eight ounces on each piece; and the absolute loss which the standard gold sustained was trifling. The loss must, of consequence, be extremely small which the currency sustains by the rubbing of the pieces one against the other.

The next experiment was made in order to compare the losses sustained by differently alloyed kinds of gold, in knocking together irregularly, and tumbling about drawers. The apparatus consisted only of a square box of oak wood enclosing the pieces, and turned round by a windlass. This experiment confirmed the general results of the others: the soft and ductile gold suffered more when rubbed against a similar compound of gold; but the roughness or smoothness of the surface made no variation upon the result.

In order to ascertain the comparative effects of the friction produced by powder, sand, &c. on differently alloyed gold, the pieces were fixed in a frame, and pressed upon a horizontal plane which moved round, and exposed to the metals a shallow groove filled with the substance that was to be rubbed against the metals. Whiting, fine writing sand, filings of gold made standard by copper, and filings of iron, were successively put into the groove. In all the experiments, the finest gold, and most ductile alloy, suffered most from the friction; and, *ceteris paribus*, the stamped dies suffered more than the flat ones.

From the whole of the experiments upon friction, it may be concluded in general, that when coins of the same quality rub together, the most ductile suffer the smallest diminution; that when coins of different qualities rub together, the most ductile are worn by the harder; and that earthy powders and metallic filings wear the most, in proportion to their ductility; the extremes of hardness and ductility being unfavourable to the durability of the impression and the preservation of the weight. Mr Hatchett's experiments seem to prove, that the standard of 22 carats is extremely well adapted to the purposes of coinage; and as silver and copper are the only alloys that can be used, the question is reduced to the comparative merits of these two metals and their mixtures. Gold alloyed with silver, though preferable in several points of view, is exceptionable, on account of the expence, the paleness of colour, and the waste arising from ductility. Mr Hatchett seems rather to incline towards gold alloyed with copper, as it is little inferior to that alloyed with a mixture of silver and copper. But he is most decidedly of opinion, that there does not appear the shadow of a reason for imputing to wear,

wear, the loss said to have been lately sustained by the gold currency of this country. His whole experiments lead indeed, with uniform clearness, to this conclusion, that whatever may be the comparative merits of the three alloys, silver, copper, and a mixture of the two, the absolute loss must be very trifling which the standard gold formed with them can sustain in the course of fair circulation.

If any thing could render this very admirable and interesting paper more valuable, to such as may be desirous of comparing the political inferences which it suggests, with the experimental grounds of Mr Hatchett's conclusions, it would be the addition of a more general table, exhibiting at one view the results of all the three sections into which the inquiry is divided.

ART. XVIII. *Pharmacopoeia Collegii Regii Edinburgensis.* 8vo. Edinburgh, apud Bell & Bradfute. 1803.

AFTER the practice of medicine was divided into different branches, and the apothecary confined himself to the preparation and composition of medicines which the physician prescribed, it became absolutely necessary that some authority should be constituted, both to determine what substances were to be kept in the shops, and in what manner they were to be prepared or compounded. At first, the direction of some eminent practitioner was generally followed by tacit consent; but rival authorities soon introduced confusion, and at last the legislatures of various civilized states authorised certain individuals or societies to prepare *Pharmacopœias*, containing lists of simples, and collections of receipts, which should in future regulate those employed in the art of Pharmacy. This privilege was conferred on the Royal College of Physicians of Edinburgh in 1685, by the Scottish Parliament; and their *Pharmacopœia*, of which this is the ninth edition, has always been held in high estimation in every part of Europe.

The first edition was published in 1699; and, according to the notions of the times, was overloaded with a variety of useless and disgusting substances, such as, *Cranium hominis violentæ morte exticti*, *Secundina humana*, *Stercus humanum*, &c.; and disfigured with many formulas, of which the principal object seems to have been, to crowd the greater number of incongruous substances into one composition. Considerable advances towards selection and simplicity were made in the subsequent editions of 1722, 1735, 1744, and 1756, especially in the last.

In the following edition of 1774, the book acquired the form which it still retains; and although important improvements were necessarily made in 1783, 1788, and 1792, the College has again thought it necessary to revise their *Pharmacopœia*, and have introduced some very material, if not beneficial alterations.

The custom of the Edinburgh College, of thus re-editing their *Pharmacopœia* after short intervals, has been found fault with, as favouring the introduction of inconsiderate changes, and rendering a work, which is intended for a standard, variable in its directions, and unsteady in its principles. These inconveniences cannot be denied. Articles are introduced in one edition, which are rejected from the next, and a new language is invented every nine or ten years; in consequence of which, those who are unable to learn and unlearn so quickly as the College directs, soon cease to learn altogether: and many practitioners of eminence are obliged to have recourse to their junior apprentices for an explanation of the technical language of the day. These inconveniences, however, are, in our opinion, much more than counterbalanced by various advantages. The frequency of publication facilitates the introduction of those improvements which naturally arise from the progress of natural history and chemistry: it renders the necessary changes less violent and abrupt; and prevents the art from ever falling far behind the state of those sciences, and becoming substantially obsolete—events which must always happen, if it were only published at considerably longer intervals. Finally, it is a direct source of real improvement; for it affords an opportunity to record the discoveries of individuals, which might otherwise die with their authors, and gives rise to discussions on doubtful points which cannot fail to be beneficial to science. The truth of these assertions may be proved by an appeal to the state of Pharmacy in Paris—in that city which arrogantly boasts pre-eminence in all the sciences connected with it. The last edition of the *Codex de Paris* was published in 1758, since which time, if we may judge by the *Manuel du Pharmacien* of Bouillon La Grange, one of their most eminent chemists, and an apothecary by profession, pharmacy has made no progress except in the preparations which are strictly chemical.

The observations which we have to make on the work of the learned Body, now before us, will have a reference either to what they have done, or to what they have omitted to do, whether in the matter, arrangement, or nomenclature. From the list of their *official simples* they have rejected *Abrotanum*, *Altorea*, *Amygdala amara*, *Anethum*, *Angelica Sylvestris*, *Aristolochia tenuis*, *Artemisia*,

miso, Arum, Asarum (by mistake, as the *pulvis asari compositus* is retained), *Atriplex foetida, Bryonia, Convallaria, Cubeba, Cumini-*, *Curcuma, Curculia, Dictamnus albus, Dulcamara, Ferrum vitriolatum, Flammula Jovis, Foenum Graecum, Fuligo ligni, Fu-*
maria, Ginseng, Hedera terrestris, Helenium, Hydrocotyle, Imperatoria, Iris palustris, Lichen Islandicus, Ligusticum, Lilium al-
bum, Lujula, Mentha sativa, Millefodium, Millepeda, Puriaria,
Pimpinella, Plantago, Prunus sylvestris, Pulsatilla nigricans, Radix Indica Lopeziana, Salix, Santalum citrinum, Satyrium, Scopolandrium, Scordium, Serpyllum, Spiritus cornu cervi, Thymus, Trichomanes, Verbascum, Vipera, Urtica, Zedoaria, and Zincum vitriolatum. On the other hand, they have introduced *Cinchona Carribaea, Cuprum, Laurus cinnamomum*, (omitted in the former edition by mistake), *Rhus toxicodendron, Rosa canina*, (formerly omitted by mistake), *Sulphuretum hydrargyri rubrum, Super-turritis portae impurus, Swietenia febrifuga*, and *Swietenia Mahagoni*.

To the former list many articles might certainly have been added. Of this the College seems to have been fully aware, and give a satisfactory reason for it : ‘ *Præstat enim copia, ut nobis videtur, quam penuria premi.* ’ Indeed, in rejecting doubtful articles which have once been admitted, considerable caution should be used ; lest by their re-admission on a future occasion, the opinions of the College acquire a fluctuating and unsteady appearance. At the same time, the admission of doubtful articles is sometimes of use in calling the attention of the public towards them, so that their real value may be ascertained.

To the systematic names of each article are subjoined its synonyms and the parts in use. Perhaps nothing more was absolutely necessary ; but a great deal of useful information might have been added without any impropriety. It would have been attended, it is true, with some trouble, and might have afforded more opportunity for criticism ; but our opinion of the College does not incline us to suppose that they would be sparing of any trouble to improve their *Pharmacopoeia*, or that they would prefer the negative reputation of committing few blunders, to the positive merit of communicating much information. The addition which we wish to see made to the present list of officinal substances, is a concise account of their habits, place of growth, sensible qualities, virtues, uses, and doses. The following example from the *Pharmacopoeia Rosifica*, of the substance which is supposed to afford the quack medicine recommended for the cure of the gout by Dr Beddoes, will show in how few words this may be done.

‘ *PHYTOLACCAE herba recens, radix. Phytolacca decandra, Linn. cl. X. ord. Decagynia* (vernacular name), *Planta perennis in Virginea, Italia, Helvetia, &c horto nostro botanico sponte crescit. Odor nullus.*

mollis.. SAPOR acris, corrosivus. VIRTUS antiperstrofa. Usus Cancer apertus & utra cancro-familia. Dosis, Succus expressus &c. tuta stirpe caloris solaris ope in speciem unguenti densatur, quo usq; foliis conqueassatis, pars cancrofa tegitur.

We shall now notice, first, the omissions ; then, the additions ; and, lastly, the changes made in the preparations. They have omitted *Axungia porcina praeparata*, *Millipeda ppt.* *Tesiae esterorum ppt.* *Opium purificatum*, *Spongia usla*, *Conserua prunorum sylvestrum*, *Oleum expressum Ricini*, *Tinctura Moschi*, *Tinctura Rhoei dulcis*, *Tinctura Valerianæ ammoniacæ*, *Extractum pulsatillæ nigricantis*, *Aqua fullatitia seminum Anethi*, *Aqua fullatitia Menthae sativæ*, *Oleum fullatitium Menthae sativæ*, *Oleum e cornubus rectificatum*, *Aqua aeruginis ammoniacæ*, *Antimonium usum cum nitro*, and *Pilulas Plummeri*. They have added, *Infusum Cinchonæ officinalis*, *Infusum Digitalis purpureæ*, *Acidum acetosum camphoratum*, *Tinctura Digitalis purpureæ*, *Tinctura Hyoscyami nigri*, *Acidum acetosum forte*, *Acidum nitricum*, *Aqua super-carbonatis potassæ*, *Aqua super-carbonatis sodæ*, *Sulphuretum potassæ*, *Hydro-sulphuretum ammoniacæ*, *Murias baryæ*, *Solutio muriatis baryæ*, *Solutio muriatis calcis*, *Carbonas ferri præcipitatus*, *Hydrargyrus purificatus*, *Solutio acetatis zinci*, *Pulvis opatus*, *Pilulae aloës cum aſciſtida*, *Unguentum oxidi hydrargyri cinerei*, *Unguentum oxidi hydrargyri rubri*, *Unguentum acidi nitri*, and *Fimplastrum meloſe infectoriū compotitum*.

The alterations in the *formule* which have been retained, are numerous, and some of them important. The language seems to have been carefully revised, and the directions are in many places rendered more perspicuous by the substitution of determinate for indeterminate quantities. The *succus spissatus cornii maculatae* is now prepared as the other *infusitated* juices, without the addition of the powder. The *extractum hematoxyli Campechianæ* is prepared by simple decoction with water and evaporation ; and the extracts of jalap and cinchona are improved, by conducting the decoction in a different manner from what was formerly directed. The proportion of sulphuric acid employed in the preparation of the nitrous and muriatic acids, is increased from one pound to sixteen ounces. The directions for the preparation of the *alcohol ammoniatum* certainly are not economical, if they can even be admitted to be scientific ; for, by using the carbonate of potash to decompose the muriate of ammonia, a large proportion of carbonate of ammonia is formed, which is not dissolved by the alcohol ; whereas lime, which was ordered in the seventh edition, disengages the whole ammonia in a caustic state, which is easily soluble in alcohol. A process is described, however, for preparing the sulphate of potash in an economical manner, from the *refiduum* remaining after the distillation of nitrous acid. The

The tincture of antimony is directed to be prepared with the oxide of antimony and sulphur, instead of the *galvis algarita*. The proportion of nitrous acid used to dissolve the mercury as a preliminary step in the preparation of the acetated grey oxide and red oxide of mercury, is increased, while that of sulphuric acid, used in forming the subsulphate of mercury, is diminished. The muriate of mercury is now directed to be prepared by decomposing the sulphate, instead of the nitrate of mercury. In preparing the *pilula aloetica*, soap is used instead of extract of gentian. The mercurial pill is made with extract of hips and starch, instead of manna and powder of liquorice. In the compound pills of rhubarb, oil of peppermint is used instead of oil of spearmint; and the soap is left out of the opium pills.

These are the principal changes which we have observed in the matter of this work; and we are satisfied that few of them have been made without sufficient reason. At the same time, we must observe, that they would probably have been more numerous, and would certainly have been received with more confidence by the public, if, by a remarkable regulation of the College, its members were not prohibited from deriving any emolument from the practice of pharmacy. This prohibition, we are convinced, has materially retarded the progress of that department of medical science in this country; for the discoveries made by those who practise it merely as an art, are seldom communicated to the public, but are rather carefully concealed from their rivals in the profession; while the improvement of pills and plasters, although of great utility, is not in itself an object of sufficient interest to engage the attention of the experimental chemist. Corporations have often been blamed for attempting to extend their monopoly too far; but this is the only instance we can remember of a chartered society voluntarily diminishing the privileges of its members, in opposition to their individual interest, to the welfare of the society, and to the intentions of the Legislature. And since it is certain that these privileges have not been renounced in consequence of any agreement with the other branches of the profession, we can see no other motive for the prohibition, but a mistaken notion of dignity. But, in these times, when a charlatan in his chariot is a more important personage than a philosopher on foot, it does not appear to us that it would be in the smallest degree derogatory to the dignity of the College, to permit its members to acquire a practical knowledge of that art, of which they are appointed by law the guardians and directors.

In the arrangements, fewer changes have been made than might have been expected. The editors have now placed the *Vulgaris medicamenta*, the *Therapæ ferræ mariae*, *Ferræ limaturæ*, &c.,

ferri, Carbonas ferri, and Ferri oxidum nigrum purificatum, among the metallic preparations, although they have allowed the three last also to retain their former places among the simple preparations. This oversight, however, is of very little consequence, and will not occur again, if, as we hope, the College shall distribute, more systematically, the other miscellaneous preparations, some of them by no means distinguished for simplicity, which are arranged under this head. It is not of much importance what principles of arrangement are adopted in such a work as this; but they should be adhered to as correctly as possible, and should never mislead. Some Colleges have chosen an alphabetical order, and it answers the purpose sufficiently; but, since the editors of the present Pharmacopoeia have preferred a more scientific plan, they should not have classed the *foculum* or matter deposited from the expressed juice of the wild cucumber among the insipidated juices, nor have swelled the list of infusions with the *Potio carbonatis calcis*, which is a mixture, or the *Aqua calcis*, which is a saline solution, or the *Mucilages*, which should form a class by themselves.

The changes in the *Nomenclature*, are much more numerous and important; and in adopting these, the College seems to have been guided by the most comprehensive and enlightened views. They have not, as on former occasions, contented themselves with correcting obvious errors, and introducing occasional improvements; but they have attempted a complete reform on general principles. Their sole object has been, to give to medicinal substances such titles as may easily and readily express their real nature and composition. To attain this object, they have bestowed upon all substances derived from the animal or vegetable kingdoms, the names which they possess in the most approved systems of natural history; and wherever it was applicable, they have used the language lately introduced with such evident advantages into the science of Chemistry. Now, when we consider that *Materia Medica* and *Pharmacy* are but branches of Natural History and Chemistry, or rather that they may be defined, the application of these sciences to the purposes of medicine, the propriety of these principles, in an abstract point of view, does not seem to admit of doubt. But since other names have already received the sanction of custom, it may still be questioned whether a reform, conducted on these indisputable principles, be altogether practicable. If its practicability can be proved, all other objections to its expediency will be easily removed; and, that it is practicable to a certain extent, is proved in the present work. The principles might perhaps have been carried still further; but the reasons which the College have

given for not doing so, are, in our opinion, just and satisfactory. Lest the titles of some medicines should become too bulky and complicated, they have attempted, to express, by them, only their active, and essential constituents. For the same reason, they have preferred some simples in common use, as *Opium*, *Moschus*, *Cayenne* and *Coccus Anglicus*, by their officinal names, thinking it sufficient to point out, in the catalogue of the *Materia Medica*, the animals and vegetables from which they are obtained. They have also left unchanged, some names, such as *Tincture* and *Spirits*, which, although scarcely chemical, have been long in common use in Pharmacy. But although, upon the whole, the Edinburgh College have given an excellent example of a reformed pharmaceutical nomenclature, we think it may still be useful to explain, more minutely, the principles on which it seems to have been formed, to show what it would have been if they had been strictly adhered to, and to ascertain the rules by which exceptions may be regulated.

The general principles are,

1. The officinal names of all substances employed in medicine should be the same with the systematic names.

2. The titles of compound medicines should indicate the nature of their composition.

To carry the first law into effect, it seems only necessary to select the systems which are to be followed. The new chemical nomenclature is so ingeniously contrived, and so well adapted for general use, that there does not appear to be any objection to employing it without limitation. On the contrary, for the purposes of Pharmacy it is rather deficient; the authors and improvers of that nomenclature, not having extended it as yet so far, as to express some very common forms of combination in a manner at all consistent with the brevity of a name. Some observations which have occurred to us on this subject, will be introduced with more propriety hereafter, when we speak of compound titles. From the received chemical language, we meet with very few deviations in the present work. In general, they have expressed, with great neatness, the relation between the acid and base in compound salts, in which either is predominant, by prefixing the particles *sub* or *super* to the name of the acid. There are, however, some exceptions. *Boras sodae* should have been *Sub-boras sodae*; *Carbonas potassae*, *Sub-carbonas potassae*; and *Sulphas aluminae*, *Super-sulphas aluminae*.

In some triple salts they have omitted the name of the less important base. *Sulphas alumina* is the *super-sulphas alumina et potassae* of chemists; and *Tartris antimonii* should have been *Tartar-santimonii et potassae*. The great length of these names is not

a sufficient objection; for if, on any account, we deviate from the names adopted by chemists on rational principles, we are retaining distinctions between the language of Chemistry and Pharmacy, the progress towards the abolition of which, is a striking merit of the New Edinburgh Pharmacopoeia. Besides, the names now adopted actually belong to other chemical substances, and if the proper names are too inconvenient, we would prefer their old synonyms, *Alumen* and *Tartarus emeticus*. *Ammoniaretum cupri* means a combination of oxide of copper with ammonia; but, as in the substance to which that name is given, the whole of the sulphuric acid contained in the sulphate of copper is still present, *Sub-sulphas cupri et ammoniz* would perhaps be more correct. Simple names should be given to simple substances; but we find vinegar named *Acidum acetosum*—distilled vinegar, *Acidum acetosum distillatum*—and vinegar, in that concentrated state in which it is obtained by decomposing the acetates, *Acidum acetosum forte*: whereas, the last, being the most simple state, should be *Acidum acetosum* or rather *aceticum*; distilled vinegar, *Acidum aceticum dilutum*; and common vinegar, *Acidum aceticum impurum*.

Adjectives ending in *-atus*, derived from the names of chemical substances, denote, according to Mr Chenevix, the latest reformer of chemical language, that their substances are acidified and in the state of combination. On this principle the terms *Ammoniatus*, *Camphoratus*, *Sulphuratus*, and *Opiatus*, used by the Edinburgh college, are objectionable. The excellent memoir of M. Proust on the sulphurets of antimony, published since the Pharmacopeia, naturally suggests some improvements on their nomenclature. He has found that the old *Vitrum antimonii* and *Crocus antimonii*, are both combinations of sulphuret of antimony with oxide of antimony; but that, in the former, it is only one ninth, and in the latter amounts to one fourth of the compound. These differences in proportion might be marked, by naming the glass, *Oxidum antimonii cum sulphureto*, and the Crocus, *Sulphuretum antimonii cum oxido*, instead of *Oxidum antimonii cum sulphure vitrificatum*, and *Oxidum antimonii cum sulphure per vitratem potasse*.

The general principle of adopting the systematic names of animal and vegetable substances, is liable to more objections, of which the most obvious is their inconvenient length: for to the name of the genus and species, that of the variety must be often added, and almost always the part or production in use must be indicated. Thus, to express simple substances, we should say, *Gumina resina Aloes perfoliatae Socotrinae*, *Moschus moschi moschiferi*, *Oleum volatile nucleus fructus myristicæ moschuge*.

It therefore becomes a matter of some importance to abridge these names conveniently. The most obvious method is, to omit those

those parts which are least necessary; but, unfortunately, we have no very general rules for determining these, and must be guided in our selections entirely by circumstances. When varieties are mentioned, the specific names may be almost always left out, as, *Aloes Socotrina* for *Aloes perfoliata Socotrina*. In some instances, when several species of the same genus are used indiscriminately, the specific names may be omitted. Thus, it is sufficient to say, *Resina pini*, *Oleum volatile pini*. The specific name may be also omitted when it is not characteristic, and when only one species of a genus is official; as *lutea* after *Genianthus*, *officinale* after *Guaiacum*, &c. But where the specific name is characteristic, it is better to omit the generic name: thus *ferula* and *cucumis* are left out, while *affi foetida* and *cocolynthis* are retained. Also, when there are more species than one in use, the specific names, when characteristic, are enough. *Catechu*, *Benzoin*, *Jalapa*, *Scammonia*, are sufficiently distinctive, without *Mimosa*, *Styrax*, and *Convolvulus*. The part or nature of the productions of organized bodies may be always omitted from the titles of their compounds, unless there be similar preparations of different parts or productions of the same substance. Thus we say, *Cortex Lauri cinnamomi* and *Tinctura Lauri cinnamomi*, *Resina Guaiaci* and *Tinctura Guaiaci*; and in a few cases, when the nature of the production is peculiar, its name alone is thought sufficient, as *Camphora*, *Moschus*, *Opium*, without adding *Lauri camphorae*, *Moschi moschiferi*, and *Papaveris somniferi*. It would also be better to use the specific names of substances whose origin is unknown, as *Kino*, alone, than give them any false or incorrect appellation.

In describing the preparations and compositions, it is impossible to be too minute in pointing out the part, state, variety, and, in general, every circumstance useful to be known with regard to the several ingredients; but in the titles of the compositions, such minuteness would be inconvenient; and therefore we must endeavour to render them sufficiently short, and at the same time characteristic. To investigate the means of attaining these ends, we shall consider the titles of compound medicines as consisting of two parts.

The first part is commonly descriptive of the form, as *Pulvis*, *Pitula*, &c.; 2dly, Of the nature of the substance, as *Oleum volatile*, *Succus expressus*, &c.; 3dly, Of the menstruum, as *Aqua*, *Vinum*, &c.; 4thly, Of the menstruum and mode of preparation, as *Infusum*, *Spiritus*, &c. Of these, the first is a strictly pharmaceutical mode of expression, and is not liable to error in its application; the others are mostly chemical, and suggest some remarks. The epithets, *fixed* and *volatile*, adopted by the Edinburgh College, mark the distinction between the two classes of oil more characteristically than *expressed* and *distilled*; but they have car-

ried their principle too far, in calling the expressed oil of Mace a fixed oil; for it is, in reality, a compound of fixed and volatile oil, and the latter is the predominant constituent. The natural combinations of resin and volatile oil, which were formerly called Turpentines, are now denominated by the Edinburgh College *Resins*, but, we are disposed to think, incorrectly; for resin is a term appropriated by chemists to one of the constituents, and cannot therefore be applied with propriety to the compound. Now, as the College have distinguished resins, when combined with a small quantity of benzoin, by the name of *Balsams*, it appears to us, that the old expression *Turpentine* should be retained to denote compounds of resin and volatile oil. Indeed, it is remarkable, that the College still call the latter constituent, *Oleum volatile terebinthinae*; more especially, when another name, *Oleum volatile pini*, might have been given, in strict conformity with the principles they have generally adopted.

The third and fourth method of denominating compositions, demand particular attention, as they form a very important branch of chemical nomenclature, which has not yet been investigated. According to the law that the titles of compound bodies should express the nature of their composition, it is obvious that those of solutions should consist of the names of the solvent and solvend, properly combined. In other compounds, the chemical neologists have added to the name of the genus or acid, the genitive of the species or base, as *Sulphur barytae*. In the same way, the names of the solvents, in the genitive, might be combined with the name of the solvent. This, in fact, is the manner in which the London College has expressed the solutions of saline bodies in water; but the other colleges use sometimes *aqua*, sometimes *liquor*, and sometimes *solutio*; nor has the principle been extended by the London College to other cases. If strictly adhered to, *aqua* should form a part of the title of all solutions in water, *alcohol* of those in alcohol, and *oleum* of those in oil. But this is not sufficient for the purposes of pharmacy; for we often wish to express the manner in which the solution is made. This may be done, either by the addition of an epithet, or by giving different terminations to the radical word, or by prefixing to it the first syllable of the epithet as a characteristic proposition; as *In.* for solutions prepared by infusion, *Dec.* by decoction, and *Dift.* by distillation. On this last principle, *In-aqua* should be substituted for infusion, *Dec-aqua* for decoction, and *Dift-aqua* for *aqua distillata*, *In-alcohol*, or simply *alcohol*, for *Tinctura*, and *Dift-alcohol* for *Spiritus*. But although these, or some such mode of expression, are what we would be led to by general principles, their harshness, and other objections to which they are exposed, make us prefer the terms at present in use. At the same time, we

we do not think it superfluous to have stated them for the consideration of chemical neologists.

The second part of the title of compositions, consists of the name or names of the ingredients or solvents. In one case only, when there are several ingredients possessing similar and equal virtues, the conclusion of the title is taken from the virtues, and not from the substances, as *pulvis anoraticum*, *alcohol ammonium foetidum*. When there are several ingredients in a composition, it will in general be sufficient to introduce the name of that on which its virtues principally depend, with the addition of the adjective *compositus*. But this very convenient word must be used as seldom as possible, and never when there are only two active ingredients. Thus, *Tinctura castorei et asa foetida* would be more descriptive than *Tinctura castorei composita*. When the names of two ingredients are introduced in the same title, it is in general better to connect them by the conjunction *et* than *cum*. For example, *Tinctura saponis cum opio* implies that opium is added to tincture of soap, whereas the composition is a tincture of soap and of opium, *Tinctura saponis et opii*.

We have given a more detailed account of this work, than some of our readers may think necessary; but the authority with which it is invested, entitled it to attention; and the result of our criticism is more honourable than any unqualified eulogium. Many of the trifling inconsistencies which we have pointed out, may be reasonably accounted for by the work being the production of a Society. For, in cases like the present, where there could be no beneficial division of labour, the number of persons engaged must rather impede than facilitate the execution. Where a contrariety of opinion exists without any controlling power, it generally happens, that, instead of reconciling them by avoiding the extremes, a kind of compromise is made, by every one retaining certain favourite points; and in return admitting others totally inconsistent with them. These inconveniences have always been felt; and accordingly, we believe that the publications of learned Bodies are most frequently entrusted to the care of a Select Committee, and, in some instances, to a single individual in whom they have sufficient confidence. But whether the present work has been the production of an individual, of a Committee, or of the College at large, its general excellence is indisputable:

ART. XIX. *The Substance of a Speech intended to have been spoken in the House of Lords, November 22. 1803.* By R. Watson, Lord Bishop of Llandaff. Second Edition. pp. 46. 8vo. London, Cadell & Davies. 1803.

THE deservedly high reputation which Bishop Watson has obtained in the literary world, and the liberality, of which he has exhibited so many specimens in the field of controversy, induce us to pay the highest degree of respectful attention to every thing that comes from his pen. We trust it will not be deemed inconsistent with such sentiments of respect, if we express some regret that he should now condescend to a popular discussion of certain political topics, infinitely below the dignity of his scientific powers indeed; but apparently beyond the sphere to which his studies in this department have extended. There is little in this unspoken speech calculated either to edify or to rouse. The style and manner are not remarkably original, nor are the illustrations distinguished by any peculiar felicity. The general political doctrines, what we usually call the political principles, are, no doubt, perfectly sound, and the polemical matters touched upon, are treated with admirable temper and candour; but the topics of consolation to which the Reverend author resorts, are in the last degree chimerical; his advices are vague, and even extravagant—we had almost said thoughtless. The practical expedients which he recommends in the present crisis of affairs, are evidently inconsistent with a sober view of the circumstances, and repugnant to the most obvious principles of political economy.

The exordium and peroration of this speech are so peculiarly adapted to the circumstances under which it does *not* come before us, and are so much at variance with the fact, of the speech having been written for publication, that it requires all our reverential feelings towards the author to suppress a smile at the incongruity.

“ My Lords—In obedience to his Majesty’s commands, and in compliance with my own sense of public duty, I this day appear in my place in the noblest assembly upon earth, convened by the most gracious Monarch that ever sat upon a throne, and required to deliberate upon the most important subjects that ever occupied your Lordships attention, or that of any of your predecessors in this House.

“ I, my Lords, could have been well contented to spend the little remainder of my life in retirement, and buried in obscurity; indifferent, alike, to the calls of professional emolument, and professional ambition: but I cannot be contented to remain indifferent to the summons of my Sovereign, in a time of distress; deaf to the calls of my Country, when its existence is endangered.—Endangered we all know it to be: but where is the dastardly soul (none such, I am confident, is to be met with)

with amongst your Lordships; none such, I hope, is to be met with amongst any of those in whose hearing I now speak)—Where is the daftardly soul, who accompanies his prospect of danger with a feeling of despair?

After describing some of the evils which would follow a successful invasion of this island, in very glowing language, sufficient, indeed, to animate with British feelings any one who may still be insane enough not to deprecate from the bottom of his soul the most calamitous of all imaginable events,—his Lordship thus brings his intended oration to a close.

‘ Such, my Lords, would be the final event of a successful invasion of this country by the republic of France. I have in some degree described it, but I do not in any degree expect it; I expect the direct contrary. My hope and my firm expectation is, that, instead of success, the enemy will experience defeat; instead of triumph, disgrace and ruin;—that, under the good providence of God, the arms of Great Britain will not only preserve our own independence, but be instrumental in exciting the spirit of other nations to recover theirs, and eventually contribute to the establishing the true liberty, and promoting the true prosperity, of France itself.—But on this subject I forbear.’

‘ And now, illustrious Peers of this mighty empire! Venerable Fathers of our most Venerable Church! I beseech you, individually, to pardon me, if, in the warmth of my zeal for the public safety (never more endangered than at present!) any expression has escaped me, unworthy the dignity of your rank to hear, unbecoming the decorum of my station to utter. Little more can be expected by the country from a man of my age, except from his prayers; and mine shall never be wanting for its preservation, and for peace among mankind.’

We are informed in the advertisement, that it was Bishop Watson’s ‘ full intention to have delivered the substance of the speech in the House of Lords; but that, as he proceeded, he found it impossible to comprehend, in a short speech, all he wished to state; that he was unwilling to take up the time of the House with his speculations, and therefore has adopted the present mode of giving his sentiments to the public.’ We shall now lay before our readers the result of these ‘ speculations.’—The substance of them appears, indeed, to have been long, if not accurately, weighed by the Reverend author; and in behalf of the most objectionable of his propositions, he cannot surely plead the pressure of other cares, or the hurry of extemporary composition; for it is now six years since he gave it to the world in another form.

After some splendid declamation, in our apprehension not very necessary, against the conduct of that people whose spirit of universal domination has left them without one sincere friend, and whose mean submission to domestic tyranny has effaced the transient admiration excited by their conquests, our author proceeds to unfold

told his opinion upon the measures fit to be adopted in the present crisis of British affairs—‘ those means which, in addition to our present exertions, may help to avert the catastrophe from ourselves.’

The first expedient which he suggests for the salvation of the country, is, that the first class under the *Defence Act* should be called out, and trained to arms, not merely as a temporary measure, but in all time coming, after the danger which now threatens us shall have passed away. It is, no doubt, a little singular, that one of his grand remedies for a present and pressing evil, should consist in a plan of future amelioration. Britain is attacked by the most powerful and victorious nation in the world; she is left to fight single-handed against all the force that such an adversary can send out; the other states, either jealous or overawed, stand back to wait the issue of the combat; in a few weeks, this momentous strife is to be decided on our own shores; the case has become extreme, beyond the reach of all former calculation; we meet the emergency by proportionate exertions; and, left to the strength of our own arms, we are calling forth all our domestic resources, in hourly expectation of the tremendous affray.—Yet all this, says Bishop Watson, avails you nothing & you must continue a similar degree of active preparation after the crisis has terminated favourably;—you must become more a military people;—this is your only chance of being saved. But, let us see what is this nostrum which is prescribed during the paroxysm of disease, and is, it would appear, to effect a present cure by a subsequent improvement of the constitution. Our author proposes, that, annually, 50,000 youths, who had attained the age of 17 during the preceding year, should be called out and taught the use of arms; and that, after six years, they should be dismissed as ~~meriti~~, except when the public service required their assistance. In this manner, he thinks a body of 300,000 young men would easily be trained in six years, and, after that, a constant succession of the same number would be kept up; so that the nation might become sufficiently military, to defy all its enemies, by drilling a portion of its youth a few days every year.

This project, as thus described, impresses us, in the first place, with a very unfavourable idea of our author’s skill in political arithmetic. How could he imagine that, by annually raising 50,000 men, we shall have a force of 300,000 at the end of six years? He cannot reasonably expect that there should remain more than 200,000 fit for service, allowing for deaths, casualties, and emigration. But, admitting the same numbers always to be kept up, by whatever means;—it is not surely a few days training that can render the nation sufficiently military to cope with the bold, fierce-

ing armies in Europe. If, on the other hand, this militia rotation is proposed as a succedaneum for the ancient militia, and not for the standing army, it is scarcely conceivable that our author should think of embodying a military force of such extent by compulsion, without the admission of substitutes; and if it is only intended to supersede the extraordinary modes of defence, by volunteers, or a levy *en masse*, we are at a loss to perceive any great novelty in the plan, unless that it very much limits the extent of the usual methods of arming the people, by beginning with a small number of recruits, and teaching that art gradually to a few, which ought as soon as possible to be communicated to all. We suspect, that if our author had pursued the idea with his accustomed acuteness and precision, his project would have terminated in a recommendation to encourage as much as possible the volunteer system, or perhaps to enforce the general Defence-act in times of peace, as well as in the present critical moment; and whatever may be the merits of such counsel, we cannot very well perceive that its originality claims the solemn statement with which he honours it in these pages.

Another expedient suggested by the Reverend author, is to conciliate the Irish Catholics, without irritating the Protestants; and his ideas upon this subject are so truly enlightened and liberal, that we cannot forbear extracting the passage, which contains the only definite plan sketched out by him for accomplishing the very desirable object in view.

* One circumstance in the situation of Ireland has always appeared to me an hardship, and that hardship still remains undiminished. I have always thought it an hardship, that a great majority of the Irish people should be obliged, at their own expence, to provide religious teachers for themselves and their families. I have the copy of a letter, in my possession, to the Duke of Rutland when Lord-Lieutenant of Ireland, in which I pressed upon his consideration, the propriety of making a provision for the Catholic bishops and clergy in that country; and I have been assured by men, well acquainted with the temper of the Irish, that had such a measure been then judiciously adopted, a rebellion would have been avoided, and Ireland would long ago have been tranquillized. Whether the time for trying such a mean of tranquillization be now so passed that it cannot be recalled, I know not; but whether it be so passed or not, the measure itself, being founded in justice, is not unworthy the consideration of Government. I love, my Lords, to have politics, on all occasions, founded on substantial justice, and never on apparent temporary expedience, in violation of justice; and it does appear to me to be just—that the religious teachers of a large majority of a state should be maintained at the public expence.

* If you would make men good subjects, deal gently with their errors; give them time to get rid of their prejudices; and especially take care to leave them no just ground for complaint. Men may for a time be

be inflamed by passion, or may mistake their pertinacity for a virtue, or may be misled by bad associates; but leave them no just ground of complaint, and their aberrations from rectitude of public conduct will never be lasting; truth and justice, though occasionally obstructed in their progress, never fail at length to produce their proper effect.

' Justice, I think, may be done to the Catholics, without injustice being done to the Protestants.—The Protestant clergy may continue to possess the tithes of the country; and the Catholic clergy may be provided for from the public exchequer of the empire. I see no danger which would arise to the Established Church from some such arrangement as this; and it would, probably, be attended with the greatest advantage to the state. We think the Catholics to be in an error; they think the same of us: Both ought to reflect, that every error is not a criminal error, and that their error is the greatest, who most err against Christian charity.' p. 25. 26. 27.

In order to effect the same great purpose of securing unanimity among the different religious persuasions of this island, by measures of justice and moderation, our author next recommends, in very powerful language, the repeal of the Test and Corporation acts. Without expressing the slightest suspicion of the Dissenters, and without wishing to exaggerate their numbers, he thinks them 'too loyal to be treated with distrust at any time, and too numerous to be soured by neglect at this time.' Now, whatever may be our opinion with respect to both of these grand questions, we will venture to affirm, that a more singular idea never entered the mind of a practical statesman, than that of obtaining unanimity in a season of imminent public danger, by stirring a discussion of the points at issue between contending sects. If, by the force of reason, Bishop Watson believes it possible to lull the jealousy of the Irish Protestants and English Highchurch-men—if he thinks a vote of Parliament, in direct opposition to all the rooted prejudices of those powerful parties, will be received with perfect contentment by them, as well as hailed with exultation by their adversaries—then may he expect, from the adoption of his proposal, an augmentation of the cordiality which now universally prevails from a suspension of the controversy. But surely when the enemy is at our gates, and when happily no backwardness is displayed by any sect in the preparations for repelling him, it would be a strange policy to lay down our arms, and set about investigating grievances, in order that we may increase the cordiality of a small part of our people, by alienating, or at least irritating, all the rest. At another time, it would not become Parliament to regard the prevailing prejudices which have so long oppressed the dissenting interest, more especially in the sister kingdom. But, in the present critical emergency, all prejudices are to be weighed by the proportions of those whom they sway; and what our au-

thor terms the ‘neglect of the Dissenters,’ is only the salutary waving of a discussion, that would certainly estrange one great body of men from the common cause, in whichever way it might happen to terminate.

Hitherto we have only seen our author recommending expedients of defence, which are by no means original, unless in the singularity of their application to the actual situation of affairs. We now come to his financial scheme, by far the most striking of the whole; and surely as novel in itself, as extraordinary in the moment of its suggestion. Bishop Watson proposes that we should take the present opportunity to pay off the whole of the national debt *. He urges, in behalf of this bold scheme, a good number of declamatory reasonings; such as, the terror with which so grand an operation would strike our enemies, and the advantages of lessening the ‘great imposthume growing on the body politic,’ before its bursting proves fatal.

Leaving such vague topics, which we confess ourselves not altogether able to comprehend, we wish to examine a few of his more plausible arguments in favour of the great measure. It would, he maintains, lessen the luxury of all ranks; it would preserve the middle classes of the people from the ruin, or emigration, to which enormous taxation is reducing them; and it would save money to all who pay taxes, by freeing them from the burdens which are imposed, in order to defray the charges of management.

Of these effects, which our author supposes would follow the redemption of the national debt, we may remark, that the two last are, in fact, one and the same thing, and are directly at variance with the first. If the measure is to lighten the burdens of the middle classes, it can only do so, by freeing their incomes from the operation of that part of the taxes which goes to pay the charge of managing the debt; and this is exactly the saving

which

* He qualifies the proposal by saying, ‘or, at least, that part which has been added to it by the Seven years war, by the American war, by the last war, and by this.’—But, in fact, more than the debt existing previously to the Seven years war (about seventy-two millions funded) has been redeemed since the year 1786, by the joint effects of the sinking fund, and the sale of the land-tax. The latter operation has freed the nation from the burden of the interest, as well as principal, of above eighteen millions; the interest of the stock purchased by the former operation continues indeed to be paid, but would instantly cease, were all the debt, contracted since the peace of Aix-la-Chapelle, redeemed: so that we may consider the payment of that debt as a clearance of every incumbrance, and the Bishop’s proposal as a project for the redemption of the whole national debt.

which our author points out as the third advantage. On the other hand, supposing the income of individuals to gain all this part which shall thus be saved from the necessary revenue, the consequence of more easy circumstances, or a greater free income, is not likely to be the diminution of luxury. But we shall pass over the obvious inconsistency and confusion that prevails in this statement of the argument, and compare the advantage which the plan certainly possesses, that of saving the charges of management, with the various evils which must necessarily arise from its execution, and the unsurmountable difficulties which lie in its way. Bishop Watson, it may be remembered, first brought the scheme forward, in the excellent Address to the People of Great Britain, which he published six years ago, and of which, he informs us, above 3,000 copies were circulated. We take our ideas of the plan from that tract, as well as from the present, in which, after mature consideration, he has thought proper again to urge it.

Some projects may be considered apart from the means suggested for their accomplishment; and we may frequently decide hypothetically in favour of a measure, without examining the means proposed for its execution; because the advantages of the end may be very obvious, while the means proposed for its attainment are exceptionable; and yet other methods may possibly suggest themselves afterwards, when the ultimate object is allowed to be desirable. But this is by no means the case with the scheme now under consideration. It cannot be viewed abstractedly from the mode of its execution; because, admitting all the advantages ascribed to the sudden liquidation of an enormous national debt, there is only one possible mode of effecting it—a heavy imposition upon capital. If the national debt is at all burdensome, it must be irredeemable by any taxes which fall upon the national income; if it is advantageous to pay it quickly off, that rapid payment can only be made by levying contributions, which must fall upon the capital stock of the country, without the possibility of being shifted upon its annual revenue.

To such a tax it is perhaps a sufficient objection, that it must fall permanently and ultimately upon one class only of the community—the proprietors of stock and of land. The merchant and manufacturer will be assed in proportion to their capitals, the landlord in proportion to his estate, and the cultivator in proportion to the stock which he employs in improving the ground. All those who live upon income not arising from fixed and realized capitals, are necessarily exempted from the operation of such a tax. Of this description are all agriculturists and office-peasants; labourers, not merely common workmen, whom no ordinary tax of compulsive operation can finally

finally affect, but those who are paid in proportion to great skill and experience, acquired from long apprenticeship or the previous expenditure of capital, whose profits arise from a stock not actually extant, and who are better able than almost any other class to pay their share of ordinary contributions; traders on borrowed capital, including dealers on consignment—perhaps we may add the smaller retail-dealers, whose profits bear little or no proportion to their capital. It is evidently in the highest degree unjust, that these orders should be exempted from the operation of a tax which is intended to free them, as well as the capitalists, from a certain annual burden; that, while the capitalist only gains by the measure the difference between his share of the old taxes and the profits he might have made on the capital which he surrenders, the annuitant should gain his whole share of the old taxes; that one class of the community should alone contribute to defray expences formerly incurred for the benefit of the whole. It may be imagined, perhaps, that the proprietors of stock will, in some cases, be able, if not to shift the payment of the tax from themselves, at least to derive from the annuitants, who share in the profits, an addition to their income proportioned to the contribution levied on their capital. Thus, it may be supposed that the proprietors of capital lent to traders, will demand a higher interest for the part which remains after payment of the tax; and that the stockholders who allow inferior capitalists to derive a profit from commission, will diminish that allowance. But a little consideration may easily convince us, that this effect never could take place. The rate at which stock can be borrowed in any country, depends, it is now understood, upon the quantity which the owners have to lend, and the extent of the demand on the part of the borrowers. Now, the imposition in question, by increasing the income of those who are not capitalists, has a tendency rather to diminish than to increase the demand of the borrowers, and, in this way, to lower the rate of borrowing. On the other hand, the quantity of stock itself not being at all diminished by the mere transference of it from the original owners to the former creditors of the public, it is impossible that the lenders can command a higher market for it than is naturally fixed by the combination of these two circumstances. In like manner, those who formerly traded on commission will receive consignments to the same amount, either from their former correspondents, who will now partly trade on borrowed capital, or from such of the public creditors as have vested their stock directly in business. In the one case, the former correspondents pay interest for the loan, and must allow the same commission; in the other, the consignees have only

only made a partial change of correspondents. If every plantation in Jamaica were divided between two proprietors, their confinees in Britain would rather receive a higher than a lower commission, because the competition of proprietors would be somewhat increased; and if the capital of each merchant who supplies the planters with loans were subdivided in the same way, the rate of interest would be diminished, rather than increased. The same observations apply to all who derive a revenue from labour of any denomination. The capital and wealth of the country remaining the same, the demand for their services will not diminish. The yearly fund destined to support them cannot be contracted or diverted, by the circumstance of not passing through the hands of government. The persons of this class, whose skill and industry are subservient to the employment of stock, resemble the traders on consignment, with this difference, that their capital cannot be taxed. The other persons of this description, who minister to the indulgence or weakness of the rich, may be compared to traders on credit, who save indolent or impotent capitalists the cares of managing their returns. All these traders or labourers will continue to draw the same income as formerly; while they are relieved, without any sacrifice upon their part, from the whole burden of their present contributions to the government. One class of the community will thus become liable for the principal, in order to save part of the charges of management, and to free all the rest from their share of the interest.

But this is not the only inequality which necessarily attends the operation of such a tax. Capitals of every extent are peremptorily assessed in the same proportion; the care with which middling and inferior proprietors have been spared by all wise financiers is at an end; and the burden of the new tribute falls upon those who have hitherto been deemed unable to bear a compulsory diminution of income. Stock of different descriptions, too, will suffer in a very different degree by a loss of the same proportional part: So that while the landholder may sell part of his estate, in order to pay the tax, without diminishing the rent of the remaining part, the merchant is thrown entirely out of his present line of business by any considerable variation in the amount of his capital. This grievance will also fall with different degrees of weight upon different proprietors of land, and merchants in different lines of business: so that scarcely any two capitalists will be affected in the same proportion by the immediate operation of the assessment, or by the ultimate consequences of the diminution.

Hitherto we have supposed that the immediate redemption of the national debt would for ever after free the country from the charge

charges of management. But this is only true in a certain degree. The blank occasioned by the transference of capital must be, in a great measure, filled up by the creation of private debts; and the expence attending the management of these must be defrayed by the debtors. Less waste and extravagance would unquestionably attend this arrangement; the whole expence, too, would be much more limited; and a most important check would certainly be given to the influence of the Crown. It deserves, however, to be considered, that the kind of men whom this change would enrich, are not much more favourable to the peace and wealth of the community, than tax-gatherers and public functionaries, against whom such invectives have been poured forth. Attorneys and pettifoggers, with the whole tribe of money-dealers, are exactly that class of the people whom a good citizen would wish to see diminish in numbers and importance: and of all the kinds of labour which some writers have denominated unproductive, the labour bestowed on litigation is perhaps the least beneficial to society. Besides, we confess that, sincere as our attachment is to the ancient privileges of the people, we cannot contemplate, without some alarm, so sudden a shock as the power of the Crown must necessarily receive by the change. We can call the projected reduction of patronage, by no other name than a violent change in the balance of the Constitution; and this consideration alone should have no small weight with us, in these times, when the unhappy experience of our neighbours has so strongly recommended to practical statesmen that predilection, which every wholesome theory had long before encouraged, for the most gradual alterations in political systems.

The sudden shifting of immense capital which we have now been considering, cannot fail to strike every sober reasoner with great alarm, independent of the inequality with which the shock must operate. The statement of a few obvious circumstances may enable us to perceive how carelessly Bishop Watson, and the other projectors who so loudly declaim in favour of such measures for liquidating the public debts, have formed their opinions on this momentous subject. In contrasting with such violent schemes, the plan of gradual redemption by a sinking fund, we by no means wish to be understood as adopting for a model the particular modification of that plan which has been introduced into the financial affairs of Great Britain within the last twenty years. Without entering into any discussion of the comparative merits of the different sinking funds which have been recommended, we shall refer, merely for the sake of illustration, to that of which experience has exemplified the effects.

The public debt of this country has been contracted during seasons of difficulty and embarrassment, when the monied interest had a ready market for their capital, and the public revenue, including the funds allotted to the payment of the interest, naturally laboured under a greater or less degree of suspicion and discredit. Partly in consequence of this distrust, and partly from the demand for money, the new lenders have always extorted much better terms than they could have procured at other times by relieving former creditors of their share in the old loans, and somewhat better terms than they could have obtained, even at those times of difficulty, by purchasing shares in former loans. Thus, every sum of money which the public has occasion to borrow during periods of extraordinary national expenditure, that is, all the sums which the state ever has occasion to raise by loan, are necessarily procured at a very considerable disadvantage, the debtor receiving a premium not only beyond what he would have obtained by lending his money at ordinary times, but even beyond what he could obtain by vesting his money in the other loans at their present discount. Financiers have still farther increased this disadvantage, by funding in those stocks which bore the greatest discount and a lower rate of interest; and in order to diminish the amount of the taxes required for paying the interest of the new debt, they have generally scrupled little about making a needless addition to the principal.—The loans made during the American war are now universally allowed to have been negotiated on terms peculiarly injurious to the revenue; and it is the opinion of many impartial persons, that, during the last war also, our finances would have suffered less had the burden of the loans been thrown more upon the interest, and had smaller premiums been given in the form of capital. But be this as it may, the fact is undoubted, that whenever the state borrows, a nominal capital of debt is created, much greater than the sums received and employed in the public service. So long as the nation is only burthened with the annuity payable upon this nominal capital, the interest at which it has raised the money is not exorbitant, although the loans may have been made at high premiums, because the interest is considerably under the market rate when stocks are at par. But if the principal of the debt is to be paid at par, the nation loses the whole difference between the sums really advanced and the capital created, which in every case must be very great. Thus, during the American war, and for the payment of the surplus expences after the peace, nearly 97½ millions were funded in the three and four per cents.; sometimes without any other premium than what necessarily arose from the low price of those stocks.

stocks at the time, sometimes by the grant of a premium in the form of short or of long annuities ; and, making no allowance on account of such premiums, the sum actually received for the capital added to the debt, amounted only to $75\frac{1}{2}$ millions. If, then, this debt were redeemed at par, the nation would lose nearly 22 millions, besides a further loss on navy bills, &c. funded after the peace. During the last war, the stocks having been still lower, and the three *per cents.* more resorted to in proportion, the difference between the money received and the capital created, was still greater. If we suppose the average price of the three *per cents.* to have been sixty (that is, three *per cent.* higher than the average at which the operation of the sinking fund was carried on), the nation would lose above sixty-three millions by redeeming at par the stock created in the three *per cents.* alone, previous to the 5th of April 1801, and independent of the Imperial loan. It is certainly not estimating too high the whole loss which such an operation must occasion, when carried through all the branches of the debt now funded, if we reckon the difference between the par, and the money advanced, at a hundred millions Sterling. Nor would it be possible to make any deduction to this amount in paying the stockholders ; for, in the first place, the constant transference of funded property prevents us from discovering who are the actual gainers of so enormous a premium ; and, next, though we could get at these, it would be a direct violation of the faith upon which they lent their money to government. It has just now been taken for granted, that the redemption is made at par. That this will be the case, we cannot entertain any doubt. The necessary effect of the sudden payment of the debt must inevitably be, to restore the par in all the permanent funds, and to raise much higher than par the stock which is not redeemable, as the life annuities, and the long and short annuities.

We need scarcely remark, how different the operation of the sinking fund is in all these respects. With a pace gradually accelerated, it encroaches upon the capital of the debt ; and, hardly influencing the price of stocks, it silently transfers the property from the creditors to the government. This transference is made in small portions, at different times ; so that the lowest fund, or the fund which is lowest in proportion to its profits, may always be chosen. During a long war, a vast portion of the debt may be purchased by the Commissioners at a lower rate than that at which it was funded : so that while the nation is borrowing at a disadvantage, it is in the same degree reaping a benefit from discharging former incumbrances at little cost. After a very great part of the stock has been purchased by the Commissioners,

missioners, the remainder will indeed rise higher than it would have done if the same stock had continued in the possession of men who often brought it into the market : But the change is so slow, that a number of channels, now empty, must be filled, before the difficulty of obtaining employment for capital shall occasion a glut in the flock market. When a resolution to pay off the debt in four years is suddenly formed, 3 *per cent.* being at sixty, every proprietor knows that, by holding out, he must gain 40 *per cent.*; while he receives, in the mean time, 5 *per cent.* of interest. When the payment is effected by the slow transference to the sinking fund, proprietors know that they cannot force their stock upon the Commissioners at par. In the former case, moneyed men will eagerly strive to get a share of the funds before they are near par, knowing that, by this purchase, their gain is sure. In the latter, they may gain one or two *per cent.*, and then be obliged to sell again before the Commissioners choose to pay more. It is probable, then, that the effects of the sinking fund will be, to displace gradually a part of the capital now vested in the national loans, and to restore it to the commerce and agriculture of the country ; while the annuitants, who cannot engage in trade, and are anxious for the best security, being the last to sell out, will receive the highest price. The debt will thus be redeemed with as little loss as possible ; and when, during a season of peace, the revenue of the fund shall be so great as to render the speedy completion of the transference certain, government may begin the change, by lightening the national burdens ; so that, on the one hand, the enormous taxes required to maintain the process of liquidation may not all at once be repealed ; and, on the other, the increased rapidity of the process may not occasion, towards its conclusion, too sudden a shifting of the remaining stock.

Bishop Watson appears not to have formed a very accurate idea of the nature and extent of the sinking fund. He undervalues its powers by not attending to the law of their increase ; and he plainly mistakes the constitution of the uniform part of the fund. Thus (in his Address, p. 2.) he talks of the inefficacy of a million a year to save us from bankruptcy. He forgets that 200,000*l.* *per annum* is also granted for this service ; and that, besides the old sinking fund (as it is called), a new one was established in 1793, for the redemption of debt contracted since that time. This fund, amounting to 1 *per cent.* on all new debts, was no less than 1,628,000*l.* *per annum* (exclusive of accumulation) when Bishop Watson first wrote ; and now, when he repeats his doctrines, it amounts to above 3½ millions, including the interest of accumulation. It ought also to be considered, that the profits of both

these

these funds, as well as of the annuities from time to time falling into the old one, are, in the strictest sense of the word, sums appropriated to discharge the debt. They are raised by taxes, which might otherwise have been taken off as the transference of stock to the fund went on. The old sinking fund, amounting now to above 2½ millions, is not indeed to increase beyond four millions, so far as it may be applied to the purchase of debt contracted previous to 1793; but the surplus may be applied to the purchase of stock since funded; and the new sinking fund has no limitation. To redeem our whole debt, then, a revenue of six millions is yearly set apart, with its own accumulations; and being raised on the income of the people, by means of taxes, which, except the legacy duty and a few stamp taxes, never can be shifted upon capital; it is equally distributed over the different kinds of profit which constitute the whole national revenue. The transference of this sum to the fund, sets free a stock equal to the sum raised from the people, after deducting the expences of management. This stock will be employed in the cultivation and commerce of the country; and, so far from being afraid lest the process of payment went on too slowly, a prudent statesman, supposing the nation to be at peace, woud rather be inclined to check the velocity of so powerful an engine, lest it should acquire a momentum fatal to the stability of commerce. Some political inquirers have accordingly been alarmed at the extensive action of the sinking fund, and have predicted very great inconvenience from its final operations. Into the general question of this species of liquidation, we do not mean at present to enter: we are only viewing it as contrasted with the proposed liquidation by sudden transference of capital. We may however remark, that those who have entertained the greatest apprehensions on this point, appear to have forgotten how gradually the action of the fund increases, how much it is under the controul of the state, and, particularly, that it can never set free, at once, more than the interest of the original incumbrances. We talk of the fund accumulating, until in so many years it has increased to so many hundred millions; but its income can never exceed the neat amount of the taxes; and during the last year, when it has reached the *maximum*, it sets free exactly that amount of stock, and no more. If, instead of being raised in taxes, this sum had remained in the pockets of the people, together with the expences of collection and management, we cannot doubt that it would have found employment as easily as the other accumulations of profits, wages, and rents. In like manner, had the whole revenue of the fund from the beginning remained in the possession of the nation, a real capital would have been accumulated much greater than the whole debt, which

would certainly have found an easy vent in the extension of trade, the improvement of waste lands, and the cultivation of colonial territories. But if the separation of the capital from its possessors is suddenly made, a stock is accumulated in hands unable to employ it, unless by restoring it to the space which the tax has left vacant. In like manner, if the accumulation of a real capital were made, by means of a fund over and above the amount of the debt (not, of course, by means of interest), it would be impossible suddenly to employ it.

We have hitherto been proceeding upon the admission that it is possible to raise, in four or five years, by taxing capital stock, a sum equal to the national debt estimated at par. But a variety of circumstances concur to render this utterly impracticable. In the first place, Great Britain has had some experience, and, we suspect, is soon to have some more, of the ease with which direct income taxes are enforced—the willingness of men to disclose their private affairs—the alacrity, more especially, with which traders exhibit to tax-gatherers and fellow-citizens the amount of their gains—and the honesty which all ranks of men display in assessing themselves according to the commands of the law. How far the same facilities would attend the execution of an act for inspecting a man's *whole* affairs, and withdrawing from his management a tenth, perhaps a fifth part of his entire property, we leave our author to determine. We know that the example of other nations is not perfectly flattering as to this matter. The Dutch, for instance, whose capital in proportion to their revenue far exceeds that of any other people, have at different times been laid under contributions intended to bear so great a ratio to the national stock, that the load must of necessity have fallen on the principal. It would appear, however, that they contrived always to shift it upon their income; for when the fiftieth penny was required, it was with great difficulty that the two hundredth could be raised; and this is not much more than one eighth of their revenue, which so frugal and wealthy a people might contrive to pay for once, by dividing it between two years.

But, in the second place, we shall allow that the whole proprietors of the kingdom are perfectly willing to pay fairly and openly. We imagine they would find it very difficult to make the payment.

In February 1801, the funded debt of Great Britain, exclusive of that part which was on account of Ireland, and exclusive also of the Imperial loan, amounted to above 457 millions; and, estimating the value of long and short annuities at their rate in the market about the same time (which is much lower than the rate at which they could be redeemed), we must add 20 millions to the

the above sum. This capital of 477 millions is exclusive of the nominal capital in the sinking fund; and it comprehends, of course, the 56 millions charged upon the income tax.* Although, then, we should imagine the whole addition for concluding the late war to have been only 23 millions, and should set off the whole extraordinary expence of the present war against the surplus occasioned by the first redempions of the debt, we shall still have a sum of 500 millions to raise in four or five years; that is, we shall have 100 or 125 millions to raise yearly, besides the present 30 millions of permanent taxes, and the additional sums requisite for the most expensive war establishment with which the country ever was burthened. We have no hesitation in declaring our inability to comprehend how the first year's payment of such a tribute could be effected. 'Let every man,' says Bishop Watson, 'be afflled in proportion to his possessions, from the owner of an estate worth 50,000l. a year, down to the peasant whose house and furniture are not worth 10l.' We shall pass over the consideration, that this equalization of taxes would render men liable to a contribution of capital, who have always been judged unable to pay even a portion of their income; that it would in fact be a tax on the necessaries of the poor, which, if they could by any means advance, they would, for years to come, levy on the income of the other classes; and we shall make no remarks on the singular argument about the relative nature of all luxuries, by which bread and a coarse blanket are, in page 21, proved to be luxurious superfluities. Our present objection to the tax on capital is, that we do not see how it can be paid; that the great landed proprietor, as well as the cottager, will find it impossible to raise the sums required; that there is no power in men of suddenly creating a circulating medium, or any other moveable property sufficient to pay, in one year, five or six times the sums formerly paid with difficulty. Admitting that the proprietors of all stock which is capable of subdivision, as mines, fisheries, land, and heritable or personal bonds, could immediately find purchasers for the amount of the tax, (though, when all are obliged to sell, it is not easy to perceive from whence the buyers may come), how is money to be raised upon the sale of aliquot parts of fixed stock in trade and manufactures, as warehouses, machinery, and dwelling-houses? With respect to farming stock, as cattle and implements of husbandry, and the tools of labourers, it is absurd to think of raising money by the sale of them, and it would not be very easy to borrow on their security.

* See Public Accounts for 1801—Resolutions moved by Mr Tierney, June 17. 1801—Ditto by the Chancellor of the Exchequer, June 22.

rity. After the first quota of the tax, indeed, has been paid, the same money will do for paying the other quotas; because the former funded proprietors will return it, in purchase-money or in loans, to the capitalists, according as their stock may be divisible or indivisible. But the first payment must evidently be made by the bills or other obligations of the capitalists; and these bills being transferred by government to the public creditors, must be redeemed from them by the transference of capital, or the constitution of new obligations; so that an immense addition will be made to the system of paper credit, and every proprietor will be in debt, for a longer or shorter period, to some person having a right to demand payment of principal as well as interest. At present, every man paying taxes may indeed be said to be in debt; but he is only indebted to creditors whom he can oblige to rest satisfied with an annuity, and who cannot distress him for more than his year's savings enable him to pay. The annual surplus produce of the land and labour of every community—the fund which is yearly added to the capital, and destined to increase the income of the people—is the fund out of which all taxes ought to be taken. As this cannot suddenly be augmented in proportion to the public demands upon extraordinary occasions, the system of borrowing has been invented; which, if kept within proper bounds, and combined with the establishment of a sinking fund, equalizes the burthens of the state among the different successions of men for whose benefit they are imposed, and defers the actual levying of the supplies until the national stock shall have gradually accumulated to the requisite point.

In the *third* and *last* place, (for it is needless to multiply the objections which must occur to every reader), there is a large class of capitalists in a trading country, who are induced, by no particular tie, except that of protection for their stock, to remain there. The proposed tax must necessarily drive these men to some other quarter of the commercial world, or at least their capital; for it would indeed be a singular folly in them to defray, by advance, a great part of the expences of the state during forty or fifty years to come, when circumstances may in a few months render another abode, or another investment of stock, more eligible. And let it be observed, that this class comprehends the monied interest, from whom alone it would be easy, in other respects, to raise the tax on capital. Bishop Watson indeed maintains, that this class should be taxed, although their stock is vested in the funds—and this seems to be an essential part of the plan: for what could be more unjust, than that those proprietors should suddenly be freed from all future taxes, by devolving the expence of the debt on the other capitalists? Yet,

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the direct taxation of the national creditor in proportion to his debt, by refusing payment of a certain part of it, is extremely like a palpable breach of faith. We are told, however, that so long as the creditor is only made to pay in the same degree with the other capitalists in the country, he cannot complain; since, if Government pays him the whole principal, it may the next moment make him refund his proportion of the contribution; and the retention of that proportion, is only the adoption of an effectual plan to prevent the assessment from being evaded.

But three circumstances render this argument, however plausible, completely inapplicable to the case. In the *first* place, it is not true that Government could levy the contribution immediately upon making the full payment which every creditor has a right to demand, when he is forced to sell his stock. A great part of the stock belongs to foreigners. Before the American war, this was supposed to be one sixth or one seventh of the whole; * and the circumstances of the nations of Europe, particularly Holland, since that time, combined with the low price of our funds, must have prevented this proportion from greatly decreasing. To tax this funded property, would be an act of national profligacy, from which not even the character of England could recover. *Secondly*, The monied interest, the growth of which has been encouraged, if not begun, by the funding system, and the existence of which is so essential to every nation in the circumstances of Great Britain, has a tendency, and unquestionably a right, to shift from one country to another, according to circumstances. The capitalists of this class would, therefore, have an undoubted right to withdraw their stock, or to remove altogether from the operation of the capital tax. *Lastly*, The easy concealment of money, and the possibility of saving it from those very operations of finance which we are now considering, forms one of the inducements to hold property in this form, rather than in the various other forms which are attended with advantages peculiar to themselves. However unfair this view may be in the individual, the government, which, on the whole, derives benefit by its influence upon the distribution of capital, has no right to complain, while loans of anticipation or funding operations are necessary parts of European finance; and the violation of good faith to which such a complaint leads, would only tend to banish entirely from the country a portion of the trading capital; whereas all the arts of the possessors can never prevent both the private and the public revenue from benefiting by its profits. We have not considered the loss which the nation must

* Pinto on Circulation and Credit, p. 33.

must sustain by the payment of the debt owing to foreigners, and the consequent removal of stock from profitable employment. This must be injurious, whether effected by the proposed plan or by the sinking fund.

Every light, therefore, in which we can view the momentous subject brought before us by the project of Bishop Watson, discloses the manifold dangers and difficulties with which it is fraught. We must repeat our astonishment at his rash, unmeasured recommendation of such a scheme; and our conviction, that his eager perseverance in proposing it, can only arise from his graver pursuits having left him little time for political inquiries. With the highest admiration of his talents and character, we feel great respect for the motives to which the present publication owes its origin; and agree with him in wishing that it may have a beneficial effect. But as it is addressed to the nation at large, and as its only object must be to rouse the public spirit in the common cause, we must take the liberty of suggesting, that, if such a thing were wanting, it is not likely to be secured by the description of military or financial schemes, especially if they resemble the projects above discussed. We should be the last of his readers to use the silly and insolent farcisms hinted at in p. 14. On the contrary, we think that more than one science would have suffered, had Bishop Watson paid a strict regard to such narrow-minded maxims as those which prohibit men from ever forsaking their professional studies. But we may be permitted to regret that, in the present deviation from his ordinary pursuits, he has not applied his talents with the same felicity to other objects; and that, by changing his tools, he has failed to strengthen or adorn the pillars of the State, with such additions as he formerly bestowed upon those of the Temple.

ART. XX. *The History of the Wars which arose out of the French Revolution: To which is prefixed, a review of the Causes of that event.* By Alexander Stephens of the Honourable Society of the Middle Temple Esq. 2 vol. 4to, London. R. Phillips, 1803.

THE rapid progress of improvement in science, arts, and manufactures, has furnished topics of exultation to many modern writers, who are delighted to discover additional proofs of the superior wisdom and attainments of the present age. We are afraid we shall be accused of the most perverse blindness to the merits of our own times, if we omit to record the facts of this description which fall within our province. To avoid this imputation, we feel ourselves called upon to announce, that the manu-

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facture of books of every description appears to be daily making the most rapid strides towards perfection. The dull authors of former ages employed nearly half a century in composing an epic poem, or in collecting and digesting materials for a history. The same operations, however, are now performed in one twentieth part of the time ; and the authors submit their works, with becoming self-complacency and satisfaction, to the public. Indeed it would be no small restraint on a modern writer, if, instead of the number of years prescribed by Horace, he was enjoined to keep his work out of the printer's hand for the same number of months. A historian of the old cast would probably have taken ten years to write a history of the last war ; whereas, Mr Stephens has, during the course of the last year, favoured the public with two large quarto volumes, bringing down the narration to the 27th day of March 1802.

It might perhaps have been expected, that in a publication compiled with so great rapidity, some observations would be made on the inaccuracy to which all recent accounts are liable, and the difficulty of reconciling various and contradictory authorities. Every person who is accustomed to read history, must be aware that the most authentic and important materials seldom appear for a long time after the period to which they refer. Those persons who are best acquainted with the transactions which are carried on, are generally in no haste to communicate them to the public. During the leisure of retirement, or in the decline of life, they sometimes compose, for the information of posterity, works which they would not have chosen to submit to the judgement of their contemporaries. It must however afford great satisfaction to the public to be informed, that Mr Stephens has got the better of all these difficulties, which in general baffle the greatest industry and perseverance. From a singular combination of talents, influence and good fortune, he is enabled to assure the public that all repositories have been laid open to him, and persons of every rank have been ready to furnish him with information. Far from complaining of want of documents, he assures the public, that, ' instead of deficiency, there is a superabundance of materials,' (Pref. p. 4.) In another part of the preface he observes, ' Upon the present occasion I have been furnished with abundance of information, and have nowhere applied in vain ; even those with whom I had not the happiness to agree in respect to opinions, have favoured me with hints, observations, and remarks.' Mr Stephens adds, ' I have also enjoyed the satisfaction of acquiring information at the fountain-head ; and chiefs who have fought and gained the battles of their country, have not disdained to read and to correct my account of them.'

It would be no small degree of presumption upon our part, to find fault with the production of an author who has had the advantage of deriving his information from 'the fountain-head,' or to question the accuracy of narratives which have been read and corrected by 'chiefs who have fought and gained the battles of their country.' We are deterred from such an attempt not only by this motive, which we are not ashamed to avow, but also by the consideration, that if we once engaged in such a task, it would prove almost endless, as there were very few parts of the narrative, indeed, which did not afford some ground for distrust and suspicion. Some of our readers may however be disposed to write a history of their own times as well as Mr Stephens : We therefore feel ourselves called upon to give them some account of the manner in which this work appears to have been compiled, that, by following the same receipt, they may be able to mix up a history equally long, and not much inferior, in other respects, to that which is now before us.

In the first place, we recommend them to collect, with due speed, *quantum sufficit* of newspapers—gazettes—journals—pamphlets—memoirs, &c. ; to cut them into different patches, and arrange them in chronological order. If they have done this with sufficient industry, they will find themselves exactly in the situation described in the preface—that 'there is a superabundance of materials,' and that 'selection rather than amplification is required upon this occasion.' The historian has now advanced one very important step ;—but in case he should become intoxicated with his success, we beg leave to suggest the precaution of altering the cant of any of these newspapers or pamphlets, where it has become obsolete, or has fallen into contempt. We must regret that this maxim has not been sufficiently attended to by the historian of the late war, and that, in many parts of his work, he has inadvertently retained a large quantity of that revolutionary *verbiage* with which every person of understanding has long ago been disgusted. If any future historian shall venture to tread the same ground which Mr Stephens has gone over, we would recommend to them to be a little more sparing of the words 'tyranny' and 'despotism,' when they speak of the government of France before the Revolution. When Mr Stephens relates that the busts of Necker and Orleans were carried about the street in triumph in 1789, he observes that they had each been 'at different times the victim of despotism,' (Introd. p. 76.) Carried on by the fervour of his eloquence, our author goes even further; for he declares that France 'was denied even the *sleep of despotism*,—the only consolation which a people can derive from the degradation of servitude.'

After the incipient historian has made the alterations which we have suggested, he may congratulate himself on having got over all the serious difficulties of his undertaking. His next object is, to impress his readers with a high idea of his penetration and powers of observation; or, as Mr Stephens expresses it in his preface, ‘it becomes necessary to vary, by means of episodes, the sickening detail of unavailing crimes, and the languid pauses occasioned by interminable slaughter.’ Our author furnishes us with so many striking instances of this kind, that if we were to detail them, we should exceed the space we have set apart for this article. One of the most important devices of that description, to which all historians, ancient and modern, have resorted, is the delineation of characters. Our author performs this part of his work with singular adroitness; so much so, that he furnishes instances of characters drawn in every possible style;—some sketched out roughly with a single stroke; some curiously finished, and displayed at full length; and others in an intermediate or half-finished state. As our readers may wish to receive a great deal of information in small compass, we quote, as a specimen of the first of these styles, the following account of Louis the XVIth’s ministers:

‘ Louis XVI. had by turns employed the frivolous Maurepas, the virtuous Turgot, the indefatigable Sartine, the politick Vergennes, the weak and tyrannical Brienne, the faulty but well-meaning Lamoignon, the amiable Malesherbes, the prodigal Calonne, the economical Necker, the wily Montmorin, and the impotent Delessart.’ *Introd.* p. 124.

Here the reader has an account of the characters of eleven different ministers of state, in much less space than would be occupied with an account of the birth and baptism of each.

The singular character and conduct of the Abbé Sieyes have excited no small portion of public curiosity. It is therefore extremely fortunate, that when Mr Stephens delivered to posterity the characters of the members of the first assembly, which, he assures us, ‘possessed a number of distinguished members, and a collection of talents scarcely to be surpassed in the annals of any nation upon earth;’ the Abbé Sieyes should appear third in the list, and the reader’s eye be attracted by a marginal title. We shall gratify the eager curiosity of our readers, by quoting his character at full length. It is in these words:

‘ Sieyes, a Catholick priest, was at once a profound metaphysician, and an adept in logic.’

How very extraordinary, that a man who was a profound metaphysician, should also possess the qualification of being an adept in logic! But who can wonder, that a character so obviously adapted for public life, should rise into notice as a statesman, during a period of unexampled turbulence and faction?

We do not think our author equally fortunate in some of his other portraits. In order, however, that our readers may have a specimen of his full-length style, we shall quote the character of Mirabeau, who is placed at the end of the list.

' Mirabeau was assuredly the first. Possessing wonderful eloquence, a gift in him derived from nature alone, he exhibits the rare example of a man without any previous study displaying all the readiness, all the boldness, all the variety, all the graces of a veteran and accomplished oratour. Born a noble, but excluded by his own order, he became a deputy from the *third estate*, and for some time sustained the popular cause, with a fluency that charmed, with a genius that astonished, with abilities that enraptured, with an enthusiasm that moved, animated, electrified the hearts of all who heard and beheld him. Such was the magick of his oratory, that while he spoke, his audience forgot the scandalous immorality of his life. Such was his good fortune, that, a few short intervals excepted, he retained his celebrity even after he had been corrupted by the court. Such was his confidence, that, with a voice enfeebled by disease and death, he bequeathed a legacy of his labours on a new constitution, destined for their use, to a mourning, but applauding people !

' As an author, he exhibited more zeal than genius, and more industry than talents : he declaimed rather than argued ; he surprised rather than convinced : yet, although his time had been devoted to licentious pleasures, his writings were ever dedicated to the cause of honour, humanity, and virtue. It was as an orator alone, however, that he stood unrivalled. But to conceive a just notion of the effects he produced, it would have been necessary to have witnessed the astonishing bursts of his eloquence on great, or the majestick cadence of his language, and the varied intonations of his voice, on ordinary occasions. Nor were the features of his face, or the gesticulations of his person, although the one was devoid of beauty and the other of elegance, deficient in interest, unsuitable to his purpose, or inadequate to his views : for the lowering frown that wrinkled his ample forehead was calculated to appal ; while the lightning of his eye seemed to blast ; the thunder of his voice, to terrify ; and the vengeance of his uplifted arm, to smite, subdue, and overcome his abashed and intimidated opponents.'

Introd. vol. I. p. 105. 106.

We are much disposed to doubt the assertion, ' that Mirabeau possessed his eloquence from nature alone,' and that he was an orator without any previous study. It is well known, that Mirabeau was a man of very great, though irregular application. Most of the speeches he delivered were previously written out ; and, during the hurry of business, he frequently employed different persons to write out speeches for him ; and selected, from their united labours, the materials of his oration. It cannot be believed, that a person who took so much pains to prepare himself for each appearance, and whose studies were by no means superficial,

perifcial, should have entirely neglected the department in which he excelled, and for which he was naturally adapted. Few orators indeed are disposed to reveal the studies by which they arrived at perfection in their art. They in general wish it to be believed that they are heaven-born orators. But it must require a great deal of faith, indeed, to suppose that Mirabeau had never cultivated his talents for public speaking. We do not perfectly understand what Mr Stephens means by saying, that Mirabeau, as an author, exhibited more zeal than genius. Excepting in his speeches, there is very little room in any of his works for the display of what Mr Stephens may reckon genius.

We regret that we have not room for the insertion of Dumourier's character. Mr Stephens observes, that during one period of his life, he 'repaired to Italy, where, like the *condituri* of a former century, he offered his sword and his services to any state or party that would employ him.' We here found ourselves obliged to have recourse to our Italian dictionary, where we discovered that *condituri* are the founders of cities. Why General Dumourier, for whom our author seems to have no great affection, should be compared to the *condituri*, either of a former or of the present century, we are at a loss to discover. We suspect, that as Mr Stephens delights in historical allusions, he intended to have made use of the word *condotieri*, with which our readers are well acquainted.

We have already illustrated the most important points in the manufacture of histories. It remains for the historian to shew some talent for philosophical disquisition. That, thank God, is now a matter of no great difficulty, as the historian has nothing to do but to take some authors who have written on the progress of civilization from the savage to the hunting state, and to add a few remarks upon the feudal system, serfs, villains, vassalage—the progress of commerce, and the distinction of ranks. This may be easily done, as we can recommend, for the perusal of our readers, at least twenty authors, from whom a proper quantity of this matter may be extracted; and there is one advantage of an introduction of this kind, that it may do for almost any one modern history as well as another. Indeed, a prudent young man will generally write something of this kind while he is at College, which he can afterwards insert in any historical composition which he may find it convenient to undertake; or if he minces it into pieces, it may be served up in the form of essays. There is one circumstance which adds very much to the profundity of such a disquisition, and impresses the reader with the highest reverence for the author's superior knowledge and reading; that is, to get some uncouth words, describing some

some unknown fact, extracted out of travels which nobody has ever read. This we think is very successfully done by our author in his preliminary observations, when he introduces the *sailing* of the Hebrides, and quotes, in a note, the travels of the Reverend John Lane Buchanan, A. M. Missionary Minister to the Isles.

In addition to these precepts, we strongly recommend to the historian, to deliver his opinion upon every subject with the most perfect confidence and decision. If he has occasion to write on military affairs, and happens to know nothing about them, we advise him to point out, in the most decided manner, all the blunders and mistakes which the different military commanders have fallen into. This is done by Mr Stephens very much to the edification of his readers; and it is to be hoped that as he has already exposed the mistakes of the Arch-Duke Charles and other great generals, if he is destined to record the events of another war, he will not have to enumerate, among other errors, the perversity of this nation in neglecting to take the advice of a man of his military experience. Upon these subjects, we are sensible of our own weakness: we shall not therefore venture to controvert Mr Stephens's opinions. On some other topics, we are less disposed to acquiesce implicitly in what he says.

Mr Stephens observes, that although Rousseau was 'fond of brilliant paradoxes and romantic theories, his pen was uniformly devoted to the cause of virtue.' Is it possible that Mr Stephens has read Rousseau's works, and can yet say that his pen was uniformly devoted to the cause of virtue? Rousseau himself does not appear to have been of the same opinion, when he declared, that a woman who read a single page of the novel of Heloise was undone. There are certainly some of his other writings which are not more favourable to the cause of virtue.

We are not more inclined to agree with Mr Stephens in his ideas of *virtue*, than in his application of that of *wisdom* to the Girondists. He says that Robespierre acquired 'little or no influence over the Jacobin Society while the Girondists were allowed to give an auspicious direction to its labours by means of their wisdom, and to make its walls re-echo with their eloquence.' We are by no means blind to the talents which some of the Gironde party possessed; but of all attributes by which they can be distinguished, that of *wisdom*, which is perhaps the most dignified which the English language affords, appears the worst chosen.

Upon the whole, the volumes before us appear considerably better than a mere republication of newspapers, as Mr Stephens seems to have availed himself of most of the popular memoirs which have

have been published. Such as they are, their value is much increased by a chronological and general index which is printed at the end of the work, and puts the information which it contains within the reach of many persons who might not submit to the labour of reading through these large volumes. This work can only be considered as a compilation from the most ordinary materials, which may be consulted with considerable advantage, till we are possessed of a legitimate history of the interesting period it embraces. Some parts of it are not devoid of entertainment and interest.

ART. XXI. *Traité élémentaire de Minéralogie suivant les principes du Professeur Werner.* Par J. M. Brochant. En deux Volumes, avec 18 Tableaux & une Planche. A Paris, Tome Premier, An IX. Tome Second, An XI. 1803.

THE French have been justly reproached with their ignorance of foreign languages ; they have been with some reason accused of treating the writers of other countries with contumelious neglect, and of despising all science and literature which did not owe its origin to the genius of a Frenchman, and was not conveyed in their vernacular tongue. The study of other languages seems to have been regarded by them as a loss of time, as an infallible indication of bad taste, and as a libel against the supereminent excellence of the indigenous literati whose works were neglected for the uncouth phraseology, barbarous idioms, and crude conceptions of their half-civilized neighbours. Those who ventured on such investigations, pursued them with some portion of the cautious secrecy attached to occult sciences ; and if their studies were rewarded by discovery and information, the source was studiously concealed, while, like good citizens, they acquitted themselves of their duty to their country by publishing and appropriating their acquired treasures of information. Without stopping to panegyrise the patriotism that practised this imposition, to concentrate in its own country the fame of all the discoveries made by the commonwealth of Europe, we may admire the ingenuity which obviated the suspicion of this pious fraud, by vilifying the reputation of the authors who were pillaged.

Could these confederated philosophers have limited literary progress to those who united with them, this grand monopoly, for which they so patriotically associated, might have been effected. Perhaps, like other zealots, they defeated their ends

by the intemperance of their censures, and excited a wish to examine those writers whose works were bad enough, or formidable enough, to warrant such virulence, or to require so desperate an attack. Those, whose vulgar souls were insensible of patriotism, and the more numerous hosts, on the weak texture of whose minds novelty operated as the most powerful incitement, eagerly courted the acquaintance of these *Tramontane* writers, and found them less savage, less deformed, less stupid, than they had been taught to expect. The fluctuating tide of public opinion now elevated them, and their genius was found to favour of inspiration.

What now remained for the patriots? Pious frauds would no longer succeed, and they could only hope that indifference would follow admiration, and familiarity prove the precursor of contempt. To hasten these desirable events, they endeavoured to render the acquaintance of the public with their foreign rivals more intimate, and to domesticate no small number of the most noted authors, by teaching them to speak the language of France, and clothing them in a suit of Parisian finery. They found that their adversaries were only formidable, because remote situations rendered them difficult of access; that their ideas appeared original and sublime, because conveyed in a language imperfectly understood; and that this veil of obscurity operated, like the *mirage* of the desert, to magnify them to preternatural dimensions. A simple approach often broke the charm; and a thorough acquaintance generally removed all remaining fascination. No man, it is said, ever appeared a hero to his valet; and probably, if the truth were told, no author ever appeared sublime to his translator. Next to the contempt of him who translates, however, is the indifference of him who reads a translation; and the literati of France found no method so easy and certain to counteract the bias of the public taste, as to pall it with the translations it so eagerly demanded.

The work before us is avowedly a detail of Wernerian opinions, translated from the best authors M. Brochant could procure; and therefore, though a mere compilation ought to be considered rather in the light of a translation, than as an original work, and we at first presumed its author to be one of the *savans* commendably employed in diminishing the overweening influence of German mineralogy. He had heard that Werner had effected a revolution in that science—that his system was the standard of authority—and that from his opinion there was no appeal; that, deeply read in the great book of nature, his eye could determine the relative antiquities of the families of minerals—arrange their claims to precedence with more than heraldic

tardic precision, from ancient granite to upstart lava—and with nice discrimination detect pretenders to antiquity, though congregated with primeval formations, and clothed in the most deceptive garb. Though hailed by universal acclamation the first of German mineralogists, the reputation of Werner has been maintained in other countries by little more than the echo of applause. His few publications are almost unknown beyond the limits of Germany, and are only fragments of that vast mass of illustration and observation which his lectures contain; and though some notion of them is given by the manuscript notes which are circulated, and form the basis of many works, they labour under unavoidable imperfection and inaccuracy.

Enveloped in an obscurity that partook of the sublime, the system, the geology, and the lectures of Werner, were talked of in other countries with an affectation of knowledge which few possessed, and with a real ignorance which all were ashamed to own. Yet how was this information to be procured? The odious toil of acquiring the most repulsive of modern languages, produced little advantage; for it only gave access to books, which all assumed the system of Werner as their basis, and all varied in their exposition of it. The means of undertaking a journey to Freyberg, are possessed by few; and they must be zealous indeed, who would not shrink from such a pilgrimage. To convey in a language generally accessible an accurate detail of Werner's *Oryctognosie*—to reconcile, by an accurate list of synomyms, the discordance of various nomenclatures—and to afford a fair specimen of the mode of description which has been so generally celebrated, was an undertaking of considerable difficulty in the execution, but could not fail to prove eminently beneficial when performed.

Such is the task which M. Brochant has undertaken; and, aware of the scanty materials which the industry and accuracy of others had prepared for his aid, we presumed that he had drained unadulterated draughts of information from the fountain-head at Freyberg, and that the stream he presented us with was unpolluted, by passing through intermediate channels. But when we had perused the observations that preface his two portly volumes, our rising feelings of gratitude were checked, by being informed that the Professor of Freyberg was only known to him through the corrupted mediums of the books which pretend to give the substance of his lectures—that he had never been in Germany—and had not even enjoyed the conversation of any German mineralogist of distinguished eminence. We were almost led to fear that the author before us was one of the faction who ignorantly or malevolently traduce the reputation of

foreign writers, by misconceiving their opinions, and mistaking their doctrines. A minute examination of the performance, however, has convinced us that our suspicions were unfounded, and that we owed M. Brochant a large debt of gratitude, although we may still regret that he was prevented from seeking for more authentic information, from enlarging his views, and removing many remaining obscurities by personal interviews, and the collation of specimens.

M. Brochant informs us, that he originally proposed only to exhibit a concise view of the mineralogical principles of Werner, accompanied by a list of synonyms; but that, afterwards, conceiving this mode inadequate to the extent and importance of the subject, he determined on compiling a complete treatise, enriched by such geological observations as he was able to collect. In preparing for the execution of this extensive undertaking, he has examined every systematic German work of eminence; he has extracted from them the most valuable parts of the mass of information they contain; and has frequently displayed no small sagacity in selecting from their jarring statements that which best assimilated with the known principles of Werner. His arrangement is copied exactly after that adopted by Werner in the lectures delivered during the session preceding the publication of the first volume of the work; his descriptions are compiled from the collected authorities of all the authors he has consulted, and, in general, are rendered much preferable to the originals, by his attention to perspicuity and brevity. The list of synonyms, though in general correct and ample, not unfrequently presents instances of the ambiguity and obscurity which have long been the disgrace of mineralogy. M. Brochant has with great judgement retained the German name, when he found no corresponding denomination established in the French language. As most of the German names are significant, the temptation to translating them was great, but he has resisted it; and whoever has attended to the subject, must think he acted wisely in not adding to a host of appellations which defy the utmost efforts of memory to retain them, and which have involved mineralogy in an obscurity that hitherto has proved, in many instances, inexplicable.

Considerable delay having occurred in the publication of the second volume, M. Brochant has availed himself of it, to announce recent additions and changes, and to detail the discoveries which have led to them. He has also enriched his work, by giving accounts of such substances as, from their novelty and rarity, had not formerly been incorporated in the system of Werner; and he has added a sketch of geological arrangement, illustrated

lustrated by descriptions of rocks, principally compiled from notes taken at Freyberg by M. Daubuiſſon, whose translation of Werner's Theory of Mineral Veins we have noticed in a former article. Folio tables of the external characters, expressed in French, Latin, and German, accompany the publication.

It is obvious that the merits of a work of this species must be limited to industry in collecting materials, and fidelity in retailing them. Both of these requisites M. Brochant appears to possess in a very eminent degree. The structure of his mind, indeed, seems rather to partake of German industry and phlegm, than of French vivacity and caprice; and had his education given another direction to his views, it is probable that his perseverance would have assured him fame as a classical editor and commentator. More gifted with judgment than imagination, and possessing more industry than genius, he has preferred the collation of dull and prolix authors to the delightful recreations of original theory; and has endeavoured to select from the knowledge others have accumulated, rather than to expand his ideas by actual observation and speculative research. Possessed of his subject, rather than carried on by it, he expounds, with equal coolness, Werner's incredulity as to the composition of the diamond, and the important consequences of Häüy's crystallographic discoveries. When he ventures a remark, it is of illustration only, and he abstains with impartiality from the expression of applause or disapprobation. He has wisely considered his work as the mere vehicle of Wernerian dogmas, and has left the mineralogists of France to determine on the merits of the system he has expounded.

Such remarks as we might have offered on this celebrated system, have been in a great degree anticipated by our observations on part of the new edition of Emmerling's Mineralogy. Though that work is deformed by many errors peculiarly its own, yet so many of our remarks are susceptible of a more general application, that we shall not intrude on the attention of our readers, what could amount to little more than a recapitulation. It is equally unnecessary for us to point out the particular passages to which we allude, as the application must be obvious to all who examine this treatise. M. Brochant informs us, that he considers the geologic observations as a mere sketch, added in order to render his work more generally useful; but by no means intended to supersede a more detailed treatise on a subject of such extreme importance, and towards which the powerful talents of Werner have been so long directed. We shall therefore suspend all observations on this subject, till we have before us a more complete work; and conclude, by thanking M. Brochant for what he has successfully performed, rather than complain of him for what he has left unaccomplished.

QUARTERLY LIST OF NEW PUBLICATIONS,

From 25. October 1803, to 20. January 1804.

AGRICULTURE.

Observations on the Utility of cutting Hay and Straw, and bruising Corn, for Feeding Animals, elucidated by Agricultural Practice; with a description of the best Machines for that purpose; also, a new Discovery, of the utmost importance to the Agricultural World, by which may be separated the more nutritious parts of Straw, for feeding Animals, from the Refuse to be used for Litter. By W. Lister, Farmer and Engineer. 8vo. with cuts.

The Farmer's Magazine, a periodical Work, exclusively devoted to Agriculture and Rural Affairs—1800, 1801, 1802, 1803. 4 vol. 8vo. Boards, Fifth Edition.

The design of the Farmer's Magazine, is to disseminate rural knowledge, and to bring forward the mass of information accumulated by the agriculturists of the British Isles, which, without some such medium, might have been confined within the breasts of the possessors, or at best only circulated among immediate friends and neighbours. The Work is constructed upon a plan different from any other agricultural work hitherto attempted; and perhaps its success may, in a great measure, be attributed to the goodness of the plan adopted. It is divided into three branches: 1. *Miscellaneous Communications*; and in this branch many valuable papers have appeared: 2. *Review of Agricultural Publications*; here the Reviewer confines himself to an examination of facts stated, or opinions offered, leaving language and composition to be tried at other tribunals: 3. *Agricultural Intelligencer*, from almost every district in Scotland, and various districts in England. This branch is perhaps most interesting to the great body of practical farmers, containing extensive information concerning the value of produce in almost every market, besides many hints connected with husbandry, which of themselves might not be of such importance as to form materials for a regular paper. It is in the two last branches that the Magazine chiefly differs from other periodical agricultural works. The principles upon which the Work is conducted are of a popular cast, and well-calculated to secure the approbation of practical agriculturists. The utility of leases; the propriety of giving the farmer a longer portion of discretionary management than hitherto entrusted to him; and the necessity of removing every obstacle to improvement, are subjects much insisted upon. Want of room in this place prevents us from giving a more enlarged view of this Publication; but it will probably be taken up at an after period, when its merits shall be more accurately investigated.

ANTIQUITIES.

Anecdotes of the English Language, chiefly regarding the Local Dialect of London; whence it will appear, that the Natives of the Metropolis

Metropolis have not corrupted the Language of their Ancestors. By Samuel Pegge, Esq. F. S. A. 8vo. boards.

The Fourteenth Volume of the *Archæologia*.

ASTRONOMY.

An Account of the Astronomical Discoveries of Kepler, including a Historical Review of the Systems which had successively prevailed before his time; elucidated by Eleven Plates. By R. Small, D. D. F. R. S. Ed.

Evening Amusements, or the Beauty of the Heavens Displayed; in which the various beautiful Appearances to be observed every Evening in the Heavens, during the Year 1804, are described; and several Means of Amusement within Doors are pointed out, by which the Time of Young Persons may be innocently, agreeably, and profitably employed. By W. Friend, Esq. M. A. Fellow of Jesus College, Cambridge. 12mo.

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TO

VOLUME THIRD

OF

THE EDINBURGH REVIEW.

A

- Africa*, Mahometan inhabitants of, contrasted with the Pagan, p. 359.
Agnes, account of a shower of stones near, 390.
Agnesi. Donna, Du Brosse's account of a conversation with, 402—contents, &c. of her Analytical Institutions, 404.
Air, fixed, experiments relating to, by Dr Black, 14.
Alioth!, probable etymology of the word, 364.
Amadis de Gaul, inquiry who was the original author of, 110—prose Amadis of Lebeira probably preceded by a metrical romance, 111—the work originally in French, 112—sketch of the story of, 127—remarks on the characters in, 131.
Argument, new, for the immortality of the soul, 95.
Ark of Noah, the prototype of naval architecture, 426—description of, 428.
Athenaeus, what his professed objects in his work, entitled, ‘The Deipnosophists,’ 181—some particulars of his life, 182—only a single copy of, escaped the ravages of time, &c. 183—editions of, 184—specimens of Schweighauer’s emendations on, 187.
Australasia, limits assigned to, by Mr Pinkerton, 75.
Authors, German, M. Lichtenberg’s description of a certain class of, 348.
—, principal, consulted by the writers of the Anglo-Saxon period of English history, 360.

B

- Baffin’s Bay*, existence of, doubtful, 79.
Balance of trade, remarks on the theory of, 236.
Barclay, Dr, general outline of his plan of anatomical nomenclature, 105.
Baudry’s Voyage à Louisiane, general character of, 81—his plan for improving the French West India colonies examined, 87.
Bonares, shower of stones in the neighbourhood of, 391.
Black, Dr Joseph, some account of, 3—commencement of his acquaintance with Professor Robison, ib.—sketch of his character, 6

—of his merits as a lecturer, 7—prominent feature in his character, 8
—his death, 10—importance of his discoveries, 11—extract from his history of the discovery of fixed air, 14—from his concluding discourse on heat, 15—merits of his lectures considered, 16—attempts to rob him of the fame of his discoveries, 19.

Brockbank, M. task he has undertaken in his *Traité de Mineralogie*, 495
—of his character as a writer, 497.

Brunanburgh, inquiry concerning the scene of the battle of, 367.

C

Cambridge, Richard Owen, his character as an author, 57—sketch of his life, ib.—specimens of his poetry, 59.

Character of Louis XVI. 224—of some of his ministers, 489—of the Abbé Sieyes, ib.—of Mirabeau, 490.

Chemistry, first principles of, far from being known, 17—advantages expected from the application of the principles of, to medical science, 411.

Clarke's Progress of Maritime Discovery, summary of the contents of, 433.

Coin, British, committee appointed to investigate the state of, 452—result of their experiments, 453.

Commerce, foreign, what the nature of, according to Mr Wheatley, 240.

Compass, mariner's, known to Noah, 427.

Cotton, animal, how produced, 89.

Courtesy, barbarous, instance of, 357.

Cretins, found only in Tibet and Switzerland, 79.

Crimea, great decrease in the population of, 148—Tartar inhabitants of, how divided, 149—productions, 150—impediments to the prosperity of, 151—irregularity of the seasons in, ib.—manufactures, &c. 152.

Cromwell, remarks on the conduct of, 171.

Cusb, migrations of the family of, after the dispersion, 429.

Cynocephali, who they were, 431.

D

Danes, their numerus fleets at an early period, 362—size of their vessels, ib.—motive of their invasion of England in the time of Alfred, 363.

Debt, national; effects of paying it off at once, 473.

Diabetes mellitus, cases of, 412—propositions of Messrs Nicholas and Gueudeville concerning, 414—examined, 415—their method of treating, 420.

Directions for writing history, 488.

Dort, great inundation at, 71.

E

Edinburgh, conjectures concerning the etymology of the name, 208.

England, remarks on the Anglo-Saxon period of the history of, 361,

F

- Ferrets*, spontaneous, of cold countries, how propagated, 359.
Foxes, Icelandic, singular device to rob the crows nests, 340.
French literati, their ignorance of foreign languages, 493—disingenuously avail themselves of the discoveries of their neighbours, ib.—their method of depreciating the works of foreigners, 494.
Fund, sinking, gradual operation of, 479—inaccuracy of Bishop Watson's idea of the nature of, 480.

G

- Garnet*, table of the analyses of varieties of, 304.
Gaffendi, is witness of the fall of a stone from the heavens, 387.
Geddes, Dr, parentage and education of, 376—accepts the charge of a Catholic congregation in the county of Banff, 377—causes of his removal from thence, ib.—is appointed chaplain to the Imperial Ambassador at London, 378—publishes a prospectus of his translation of the Bible, 381—his death, 382—general remarks on his translation, ib.—his character by Mr Good, 384.
Genitive case, Latin, on the ancient form of, 65.
Godwin's, Life of Chaucer, expectations raised by the title of, 437—disappointed on a perusal, 438—scanty information concerning the proper subject of the work, ib.—device of the author to swell out his volumes, ib.—remarks on the execution of the plan, 443—of the style, 450.
Gold, effects of different alloys in destroying the ductility of, 453—specific gravities of, when alloyed with different metals, 454—changes produced in the bulk of, by different mixtures, ib.—general conclusions, ib.—comparative effects of friction upon, 455.
Geography, attractive and popular nature of the science of, 67—little cultivated on the Continent, ib.
German literature seldom fairly appreciated in our country, 343—causes which formerly obstructed its progress, 344.
Grants' Causeway, M. Pictet's description of, 291.
Gibbon the historian, defects of his style, 373.
Gmelin, route of his journey through the Russian Empire, 147.—
Government, upon what principles founded, 176.
 —————, republican, in what circumstances of a state it is most suitable, 169.
Guldenstaedt, route of his travels through the Russian dominions, 147.

H

- Happiness*, method of measuring the quantity of, enjoyed, 293.
Hägg, M. his investigation of the rhomboidal figure of the fragments of calcareous spar, 45—his distribution of minerals, 49—innovations in the nomenclature, &c. of mineralogy, 50—inducements to examine, 53—general character of his work, 56.
Heat, latent, a discovery of Dr Black's, 38—unjustly claimed by De Luc, 21.

- Hernia*, Dr. Monro's definition of, 138.
History, English, remarks on the Anglo-Saxon period of, 361.
 — modern, directions for writing, 488.
Holland, progressive geography of, 71.
Humour, Professor Millar's definition of, 179—why not productive of the same degree of respect to the possessor as wit, 180—to what the great exuberance of humour in English writers is to be ascribed, ib.
Hunter, Dr, specimens of his talents for annotation, 61—dissertation on the ancient form of the Latin genitive case, 65.

I

- Iceland*, anciently a seat of learning, 335—temperature of the weather, ib.—diseases, 336—houses, ib.—food of the inhabitants, 337—employments and amusements, 338—grand natural scenery, 339—curious device of the foxes to rob the crows nests, 340—general character of the inhabitants, 341—agriculture, ib.—decay of population, 342.
Idiots, formerly kept by great men for the sake of diversion, 179.
Ilverevalle, or roaring mountain, a natural curiosity in Iceland, 341.
Insanity, notional, nature of, 282.
Iron, account of the descent of a mass of, from the heavens, in the East Indies, 397—part of it forged into a sabre, &c. ib.

K

- Karamsin*, Mr, one of the class of sentimental travellers, 321—cursory sketch of his tour, 322—reflection on a mad philosopher, 326.
Kcir, Mr, first observes the rhomboidal figure of the fragments of calcareous spar, 45.

L

- Labour*, mechanical, effects of the subdivision of, 175.
Lally, Tolendal, M. anecdote of, 58.
Language, change in that of any science when rendered necessary, 99.
Lavoiser, M. conduct of, towards Dr Black, 21—objections to his doctrine concerning the extrication of light and heat, &c. 24.
Law in the infant age of society teach economics, 338—exemplified in the Icelanders, ib.
Learning once cultivated in Iceland, 335.
Levè, a stupendous work of antiquity in France, described, 77.
Lichtenberg, M. some account of, 346—his description of a certain class of German authors, 348—sentiments with regard to physiognomy, 349—on the German mode of education, 351—on the philosophy of Kant, 352.
List, M^s le Abbé de, inquiry into his merit as a poet, 26—in what respects he has deviated from the common style of French poetry, 28—of his 'Malheur et Pixis,' 31—extracts from, 33.
Loam, Government, negotiated at a disadvantage, 478.
Lapotchin, route by which he travelled through the Russian dominions,

Louis XVI. letters of, 217.

Luc, M. de, claims the discovery of latent heat, 21.

M

Mahomet, proof of the superiority of his doctrines to the African superstition, 356.

Manners, refined, alterations which have taken place by the introduction of, 179.

Masquerading, whence the practice of, arose, 179.

Materialism, what class of authors chiefly supporters of the doctrines of, 278.

Metaphysician, labours of, compared to those of the grammarian, 276.

Micr. their manner of crossing rivers in Iceland, 340.

Millar, Professor, merits as a lecturer and an author compared, 154—distinguishing feature of his intellect, 155—a leading principle of, 157—his political opinions, 158—curious extract from his works with regard to the Scotch Parliament, 163—remarks on the character of the Scots, 166—to what circumstances of a state a republican government is best adapted, 169—character of James VII. 172—eulogium on the Prince of Orange, ib.

Mineralogy greatly improved by the discoveries in chemistry, 42.

Mirabeau, character of, 490.

Moon, possibility of bodies being projected from, within the sphere of the earth's attraction, 400—principal objection to, 401.

Mythology, heathen, discoveries made in, by Messrs Bryant and Clarke, 430—their curious plan of analyzing, 431.

N

Nature, sublime appearances of, in Iceland, 339.

Newton, chief characteristics of, as a philosopher, 5—remarkable analogy between, and Dr Black, 6.

Nomenclature, advantages of a systematic plan of, in science, 100.—changes in that of the new edition of the Edinburgh *Pharmacopeia*, 462.

O

Oceans, Indian and Pacific, limits assigned to, by Mr Pinkerton, 74.

Odin, the northern hero, conjectures concerning the era, &c. of, 364.

Ordeal, curious species of, practised among the Africans, 359.

Ortobiography, ancient Scotch, some remarks on, 204.

P

Pallas, Professor, route of his travels through the Russian dominions, 147—abstract of his account of the Crimea, 148.

Pharmacopeia, Edinburgh, when first published, 457—subsequent editions of, ib.—advantages and disadvantages of its frequent republication compared, 458—list of simples rejected from the late edition, ib.—of those added, 459—changes, additions, &c. in the preparations, 460—in the arrangement, 461—in the nomenclature, 462.

- Philosopher*, Scotch, idea entertained of by the learned in England, 156.
Philosophy, inductive, whether capable of being applied with advantage to the science of mind, 272.
Pheenicians, the earliest maritime nation, 432—extent of their navigation, ib.
Physiognomy, remarks on, by M. Lichtenberg, 349.
Pictet, M. what the object of his travels, 287—curious view of, 288—instances of the kindness and generosity of the Scots, 289—soliloquy on being about to cross over to Ireland, 291—description of the Giants Causeway, ib.—visit to Mr Edgeworth, 292—mode of measuring happiness, 293.
Pinkerton's geography, topics discussed in, 69—progressive geography of Holland, 71—chief historical epochs of Switzerland, 72—in what respects he has deviated from the plan of former geographers, 73—limits assigned by him to the Indian and Pacific Oceans, 74—to Australasia and Polynesia, 75—omissions and errors he has fallen into, 76—causes assigned for the decrease of population in Spain disputed, 77.
Piracy, anciently not dishonourable in the northern nations of Europe, 370.
Plan for a compendium of modern discovery, 431.
Poetical extracts, from De Lille's ‘Malheur et Pitie,’ 33—from the works of Mr Cambridge, 59—from Warton's history of poetry, 113—from Amadis de Gaul, 118, &c.—from Dr Cririe's Scotch scenery, 329, &c.
Polynesia, proposed as the general name for the islands in the Pacific, 74—limits assigned to, by Mr Pinkerton, 75.
Population, causes of the decay of, in Iceland, 342.
Preparations, lists of those omitted, added, &c. in the new edition of the Edinburgh Pharmacopeia, 460.
Proteus, arguments for his being the same with the Joseph of Scripture, 320.
Publications, new, quarterly list of, 253, 498.
Pungs, society in Africa, account of, 359.

Q

- Quartz*, Mr Emmerling's description of, 298.

R

- Reid*, Dr, some account of his life, 269—in his youth admitted the opinions of the sceptical philosophy, 270—character of, by Mr Stewart, 285.
Republic, in what cases that form of government may be most eligible, 160.
Robison, Professor, how his acquaintance with Dr Black commenced, 3—his sketch of the Doctor's character, &c. 6.
Romance, earliest tales of, written in verse, 512—when begun to be composed in prose, 113—in what particular the metrical differed from the prose romances, 116—coarse style of the early romances, 121.

S

Scotish philosopher, idea entertained of, by the learned in England, 156.
Scotland, curious passage concerning the Parliament of, 163—definition, &c. of the national character, 166.

Schweigbauser's emendations of *Athenaeus*, cursory view of, 187.

Shem, supposed the progenitor of the Indians, 429.

Sidonians, origin and gradual progress of navigation among them, 432.

Sierra Leone, method of clearing the lands in the neighbourhood of, 356—instance of barbarous courtesy among the natives, 357—trade, dress, &c. 358—Mahometan and Pagan inhabitant contrasted, ib.—curious species of ordeal, 359—account of the Purra society, ib.

Simples, lists of those rejected from and introduced into the new edition of the *Edinburgh Pharmacopœia*, 458.

Sneddon, or *Snowden*, an old name of *Stirling Castle*, fanciful etymology of, 207.

Soul, new argument for the immortality of, 95.

Spain, reasons assigned by Mr Pinkerton for the decrease of population in, 77—north-west corner of, inhabited by a race of people, distinct, &c. from the other inhabitants, 75.

Spar, calcareous, rhomboidal figure of the fragments of, observed by Mr Keir, 45—investigation of, extended by M. Haüy, ib.

Stones, fall of, from the heavens, a popular belief in most countries, 387—instances of, authenticated, by Gassendi, ib.—at Evesham and the neighbourhood of Verona, 388—near Pont de Vesle, 389—at Lucé, ib.—near Agen, 390—in Yorkshire, ib.—near Behares, in the East Indies, 391—near Bordeaux, 392—general conclusions from thence, ib.—analysis, &c. of several of the stones, 393—analogy between them and the masses of native iron found in some countries, 396—enquiry into their probable origin, 398—objections to their being formed in the earth by lightning, or projected by volcanoes, &c. ib.—a more plausible hypothesis, 399.

T

Talleffsen, said to be bard to the king of Scandinavia, 363—reasons for doubting the truth of, ib.

Tartars, character of the different classes of, in the Crimea, 149.

Titan, etymology of the name, 317.

Tournaments, era of their invention, 369.

Travellers, sentimental, remarks on, 321.

Turgot, M. saying of, 271.

Turner, Mr, plan and arrangement of his history of the Anglo-Saxons, 363—conjectures concerning the era, &c. of Odin the northern hero, 366—attempts in his style to imitate Mr Gibbon, 372—example of the defects of, 373.

V

Vendians, conjectures concerning their origin, 369.

Virgil, emendations of some passages of, 61.

W

Water, uses of, in the economy of nature, 15—adapted to its various ends by the operation of heat, 16.

Wilson, Bishop, exordium of his speech intended to have been spoken in the House of Lords, 468—plan for raising a great military force examined, 470—expedient to conciliate the Irish Catholics, 471—proposal for paying off the national debt examined, 473.

Wheatley, J. general character of his remarks on currency and commerce, 252—his objections to the leading doctrines of the mercantile theory examined, 233—on the balance of trade, 236.

Williams's, Mills, correspondence of Louis XVI., inquiry into the authenticity of, 211—merits of the translation, &c. examined, 213—extracts from, 217.

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